TOSHIBA

FILE NO. 010-200312

SERVICE MANUAL

LCD Color Television

32HL83

DOCUMENT CREATED IN JAPAN, Nov., 2003

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⚠ SERVICE SAFETY PRECAUTIONS

- The caution items shown here describe major safety issues and should always be observed.
- The meanings of the various indications are as follows.

⚠ WARNING	Indicates a hypothetical situation in which service personnel and nearby third parties, or even end users due to a product defect after the service operation is completed, could possibly be in danger of injury or even death in the event of operational error.
⚠ CAUTION	Indicates a hypothetical situation in which service personnel and nearby third parties, or even end users after the service operation is completed, could possibly be in danger of injury, or where there could be physical damage in the event of operational error.

* Physical damage means major damage to a home, furnishings and other possessions.

Examples of marks

⚠ **SHOCK HAZARD**	The △ indicates caution (including danger and warning). The actual meaning of this caution is indicated inside the △ or nearby illustrations or text. The example shown to the left indicates the danger of "electrical shock".
⦸ **PROHIBIT DISASSEM-BLING**	The ⦸ indicates a forbidden action. The actual meaning of this caution is indicated inside the ⦸ or nearby illustrations or text. The example shown to the left indicates that disassembly is forbidden.
● **UNPLUG**	The ● indicates a forced action (an action that must be performed). The actual meaning of this forced action is indicated by ● or nearby illustrations or text. The example shown to the left indicates that the power plug must be disconnected.

	⚠ **WARNING**
KEEP CHILDREN AWAY	• Always advise users to keep children away. There is danger of injury to children from tools, disassembled products, etc.
UNPULUG	• Always disconnect the power plug before starting work whenever power is not required. Failure to disconnect the power plug before starting work can result in electrical shock.
SHOCK HAZARD	• Depending on the model, use an insulation transformer or wear gloves when servicing with the power on, and disconnect the power plug to avoid electrical shock when replacing parts. In some cases, alternating current is also impressed in the chassis, so electrical shock is possible if the chassis is contacted with the power on.
USE SPECIFIED PARTS	• Always use the replacement parts specified for the particular model when making repairs. The parts used in products have the necessary safety characteristics such as inflammability, voltage resistance, etc.; therefore, use only replacement parts that have these same characteristics. Use only the specified parts when the ⚠ mark is included in a circuit diagram or parts list.
CAUTION FOR WIRING	• Parts mounting and routing of the wiring should be the same as that used originally. For safety purposes, insulating materials such as tubing or tape is sometimes used and printed circuit boards are sometimes mounted floating. Also make sure that wiring is routed and clamped to avoid parts that generate heat and which use high voltage. Always follow the original scheme.
CAUTION FOR ASSEMBLING / WIRING	• After a repair has been completed, reassemble all disassembled parts, and route and reconnect the wiring, in accordance with the original scheme. Do not allow internal wiring to be pinched by cabinets, panels, etc. Any error in reassembly or wiring can result in electrical leakage, flame, etc., and may be hazardous.
CHECK INSULATION RESISTANCE	• After completing the work, disconnect the power plug from the outlet, remove the antenna, turn on the power switch. Then, use a 500V insulation resistance meter to check the insulation resistance of the antenna terminal, other metallic parts and between the prongs of the power plug to make sure that the insulation resistance is 1M Ω or more. The set will require inspection and repair if the insulation resistance is below this value.
PROHIBIT REMODELING	• Never remodel the product in any way. Remodeling can result in improper operation, malfunction, or electrical leakage and flame, which may be hazardous

HANDLING THE LCD MODULE

Safety Precautions

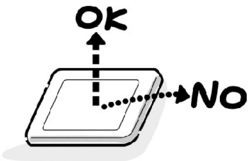
In the event that the screen is damaged or the liquid crystal (fluid) leaks, do not breathe in or drink this fluid. Also, never touch this fluid.

Such actions could cause toxicity or skin irritation. If this fluid should enter the mouth, rinse the mouth thoroughly with water. If the fluid should contact the skin or clothing, wipe off with alcohol, etc., and rinse thoroughly with water. If the fluid should enter the eyes, immediately rinse the eyes thoroughly with running water.

Precautions for Handling the LCD Module

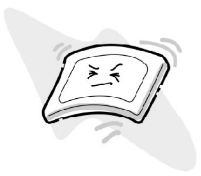
The LCD module can easily be damaged during disassembly or reassembly; therefore, always observe the following precautions when handling the module.

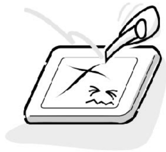
1. When attaching the LCD module to the LCD cover, position it appropriately and fasten at the position where the display can be viewed most conveniently.



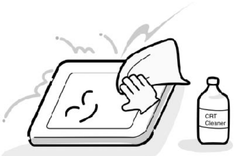
2. Carefully align the holes at all four corners of the LCD module with the corresponding holes in the LCD cover and fasten with screws. Do not strongly push on the module because any impact can adversely affect the performance. Also use caution when handling the polarized screen because it can easily be damaged.

CAUTION The metal edges of the LCD module are sharp, so use caution to avoid injury.





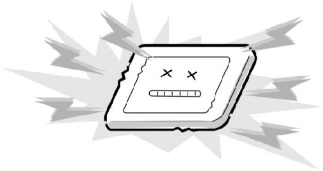
3. If the panel surface becomes soiled, wipe with cotton or a soft cloth. If this does not remove the soiling, breathe on the surface and then wipe again.
   If the panel surface is extremely solied, use a CRT cleaner as a cleaner. Wipe off the panel surface by drop the cleaner on the cloth. Do not drop the cleaner on the panel. Pay attention not to scratch the panel surface.



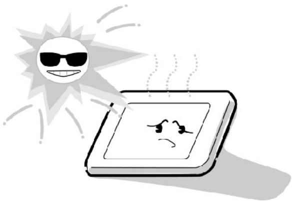
4. Leaving water or other fluids on the panel screen for an extended period of time can result in discoloration or stripes. Immediately remove any type of fluid from the screen.

5. Glass is used in the panel, so do not drop or strike with hard objects. Such actions can damage the panel.

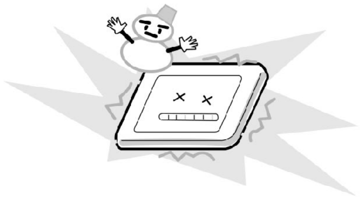
6. CMOS-LSI circuitry is used in the LCD module, so avoid damage due to static electricity. When handling the module, use a wrist ground or anchor ground.

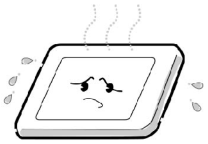


7. Do not expose the LCD module to direct sunlight or strong ultraviolet rays for an extended period of time.

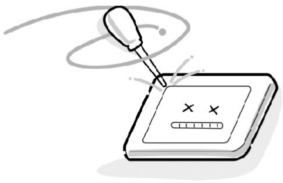


8. Do not store the LCD module below the temperature conditions described in the specifications. Failure to do so could result in freezing of the liquid crystal due to cold air or loss of resilience or other damage.

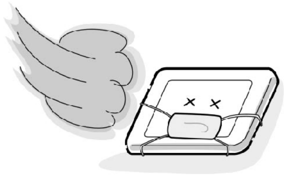




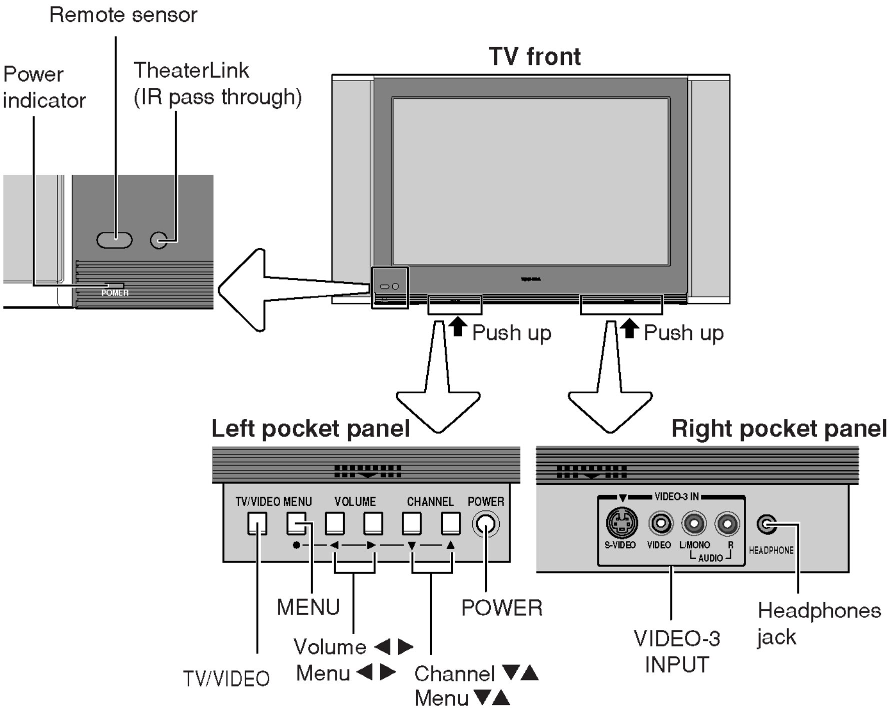
9. Do not disassemble the LCD module. Such actions could result in improper operation.

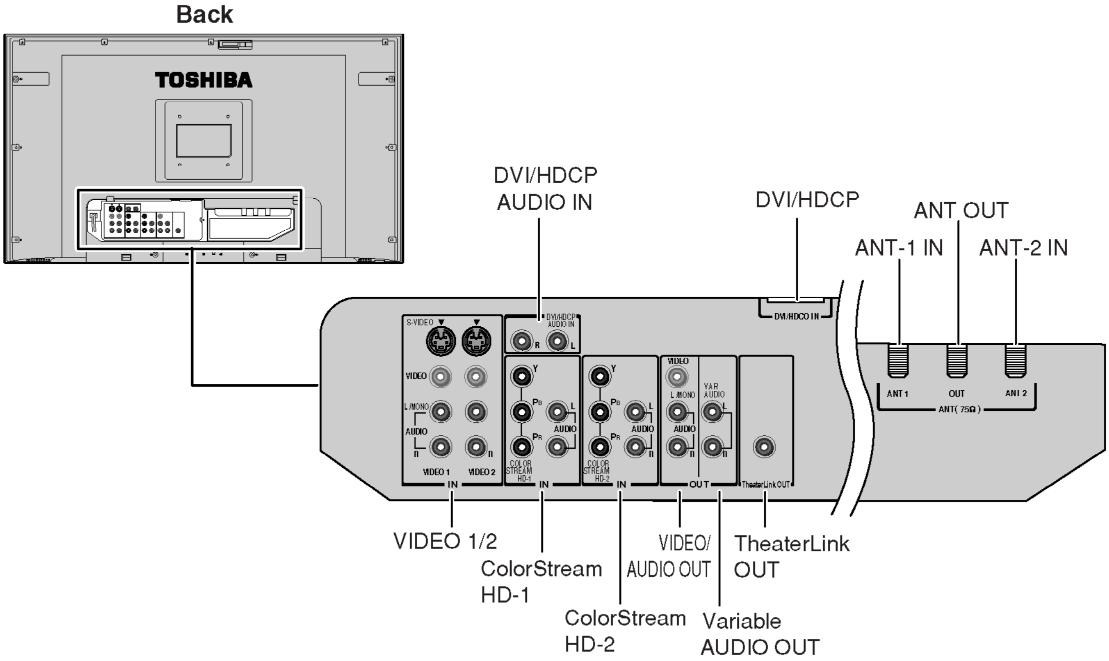


10. When transporting the LCD module, do not use packing containing epoxy resin (amine) or silicon resin (alcohol or oxim). The gas generated by these materials can cause loss of polarity.



LOCATION OF CONTROLS


Remote sensor
Power indicator
TheaterLink (IR pass through)
TV front
POWER
Push up
Push up
Left pocket panel
Right pocket panel
TV/VIDEO MENU
VOLUME
CHANNEL
POWER
VIDEO-3 IN
S-VIDEO
VIDEO
L/MONO
R
AUDIO
HEADPHONE
MENU
POWER
Volume ◀ ▶
Menu ◀ ▶
TV/VIDEO
Channel ▼▲
Menu ▼▲
VIDEO-3 INPUT
Headphones jack


Back
TOSHIBA
DVI/HDCP AUDIO IN
DVI/HDCP
ANT OUT
ANT-1 IN
ANT-2 IN
S-VIDEO
VIDEO
L/MONO
AUDIO
R
VIDEO 1
VIDEO 2
IN
DVI/HDCP AUDIO IN
R
L
Y
PB
PR
L
AUDIO
R
COLOR STREAM HD-1
IN
COLOR STREAM HD-2
IN
VIDEO
L/MONO
AUDIO
VAR AUDIO
OUT
TheaterLink OUT
DVI/HDCP IN
ANT 1
OUT
ANT 2
ANT(75Ω)
VIDEO 1/2
ColorStream HD-1
ColorStream HD-2
VIDEO/ AUDIO OUT
Variable AUDIO OUT
TheaterLink OUT

Remote Control

POWER turns the TV on and off.

SLEEP allows access to the automatic TV shut-off function .

LIGHT The first press of the LIGHT button lights the keypad and turns on the Illumination mode. With the Illumination mode on, pressing any other key lights the keypad for 5 seconds (10 seconds if you're in programming mode).
Subsequent presses of the LIGHT button toggle between turning the Illumination mode on and off.

Channel Numbers (0-9, 100) allow direct access to channels.

MODE cycles through the six device modes: TV, CABLE/SAT, VCR, DVD, AUDIO1, and AUDIO2. The mode indicator light will remain lit for a few seconds.

PIC SIZE cycles through the five pictures sizes: Natural, Theater Wide 1, 2, 3, and Full.

FAVORITE allows access to the favorite channel search function.

MENU allows access to on-screen programming menus.

ENTER sets programming menu information.

▲▼ ◀ ▶ select or adjust programming menus.

FAV ▲▼ cycles through favorite channels.

CH ▲▼ cycles through programmed channels.

VOL ▲▼ adjusts the volume level.

EXIT exits the programming menus.

INPUT selects the video input source.

MUTE mutes the sound.

RECALL displays on-screen information.

CH RTN returns to the last viewed channels.

POP CH ▲▼ selects the POP (picture-out-picture) channel.

SPLIT turns the POP feature on and off.

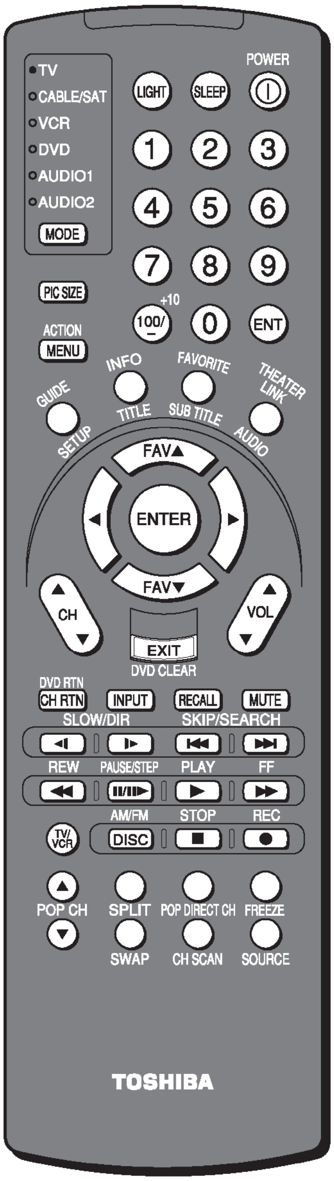
CH SCAN allows access to the programmed channel search function.

FREEZE freezes the POP picture.

SWAP switches the main and POP pictures.

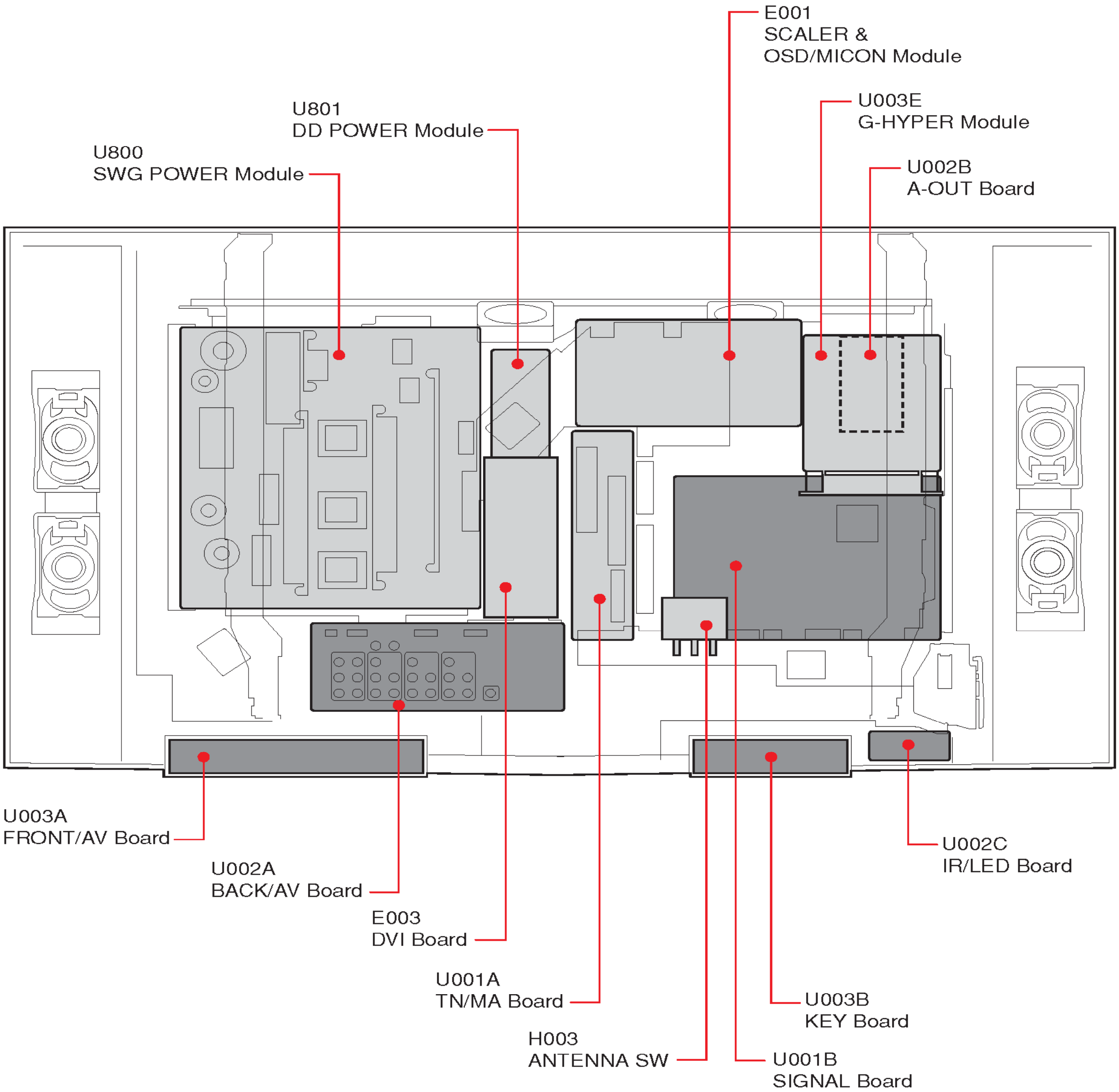
POP DIRECT CH allows direct access to POP channels.

SOURCE selects the POP picture source.


TV
CABLE/SAT
VCR
DVD
AUDIO1
AUDIO2
MODE
POWER
LIGHT
SLEEP
1
2
3
4
5
6
7
8
9
PIC SIZE
ACTION
MENU
+10
100/
0
ENT
INFO
FAVORITE
THEATER LINK
GUIDE
TITLE
SUB TITLE
SETUP
AUDIO
FAV▲
ENTER
FAV▼
CH
VOL
EXIT
DVD CLEAR
DVD RTN
CH RTN
INPUT
RECALL
MUTE
SLOW/DIR
SKIP/SEARCH
REW
PAUSE/STEP
PLAY
FF
AM/FM
STOP
REC
TV/VCR
DISC
POP CH
SPLIT
POP DIRECT CH
FREEZE
SWAP
CH SCAN
SOURCE
TOSHIBA

Note:
The error message "Not Available" will appear if you press a key for a function that is not available.

LAYOUT OF MAJOR BOARDS

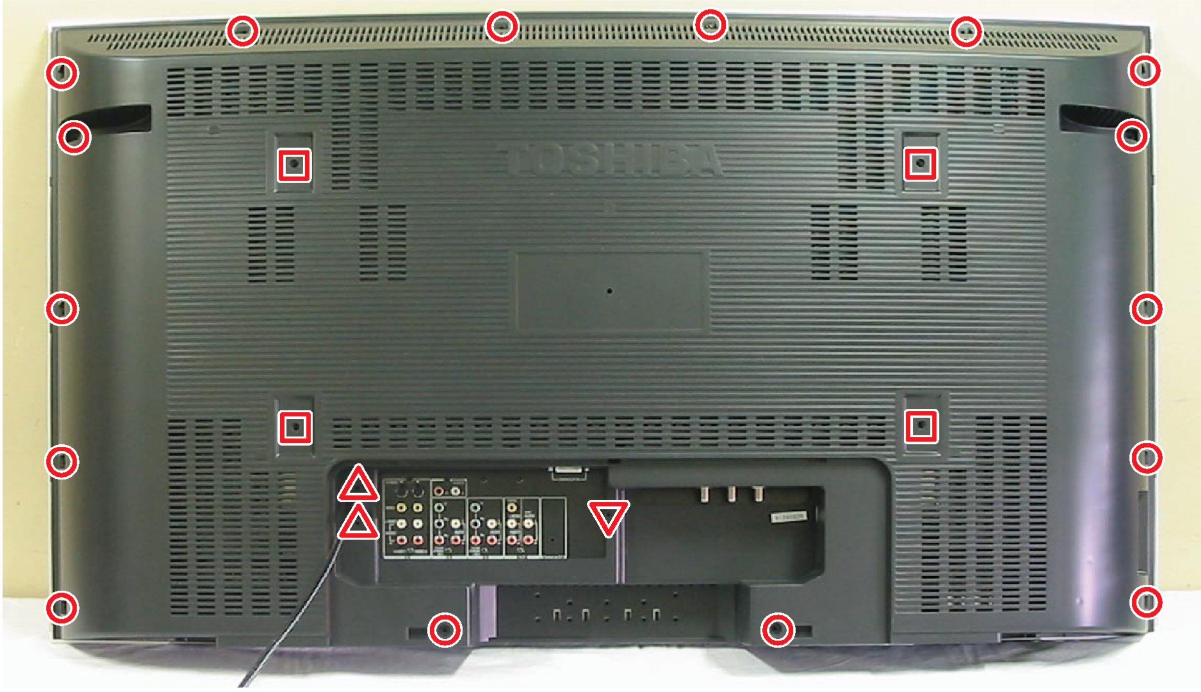

E001
SCALER &
OSD/MICON Module
U003E
G-HYPER Module
U801
DD POWER Module
U800
SWG POWER Module
U002B
A-OUT Board
U003A
FRONT/AV Board
U002C
IR/LED Board
U002A
BACK/AV Board
E003
DVI Board
U001A
TN/MA Board
U003B
KEY Board
H003
ANTENNA SW
U001B
SIGNAL Board

MECHANICAL DISASSEMBLY

■ Removing the rear cover

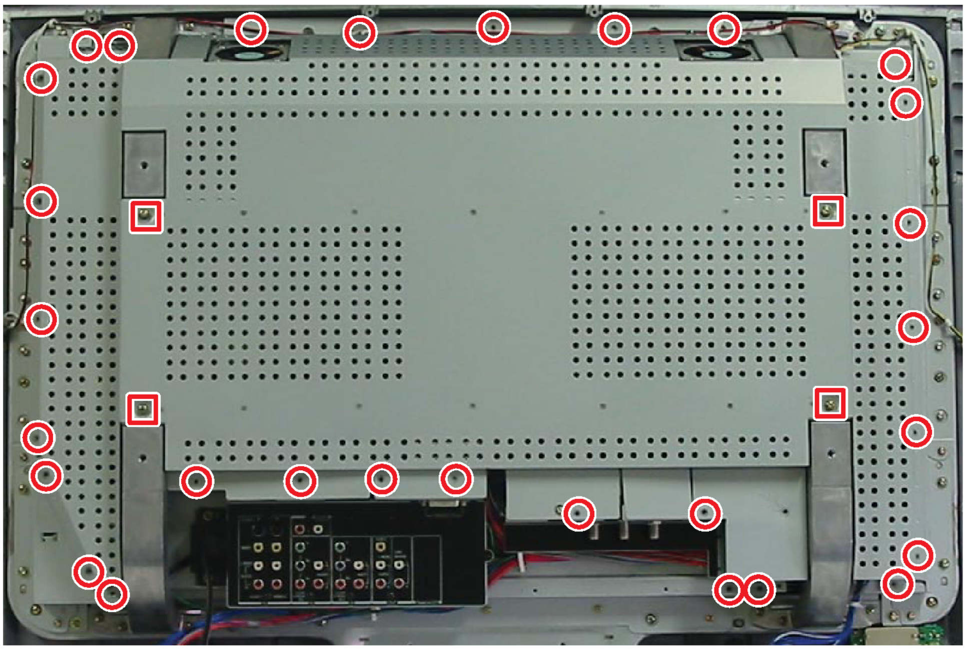
＊ Note: Be sure to lay down the main body (by placing its screen downward) for disassembling.

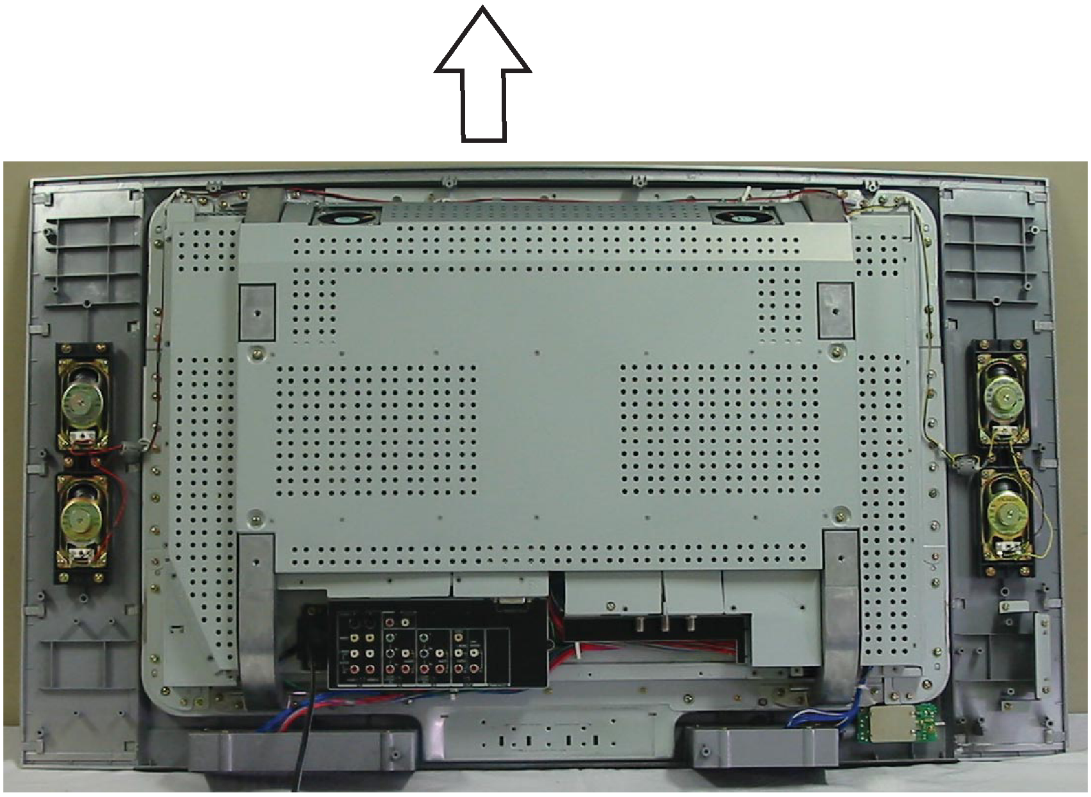
- Remove 16 screws (○: 4X12).
- Remove 4 screws (□: 6X16).
- Remove 2 screws (△: 3X12).
- Remove a screw (▽: 3X8).



■ Removing the brackets

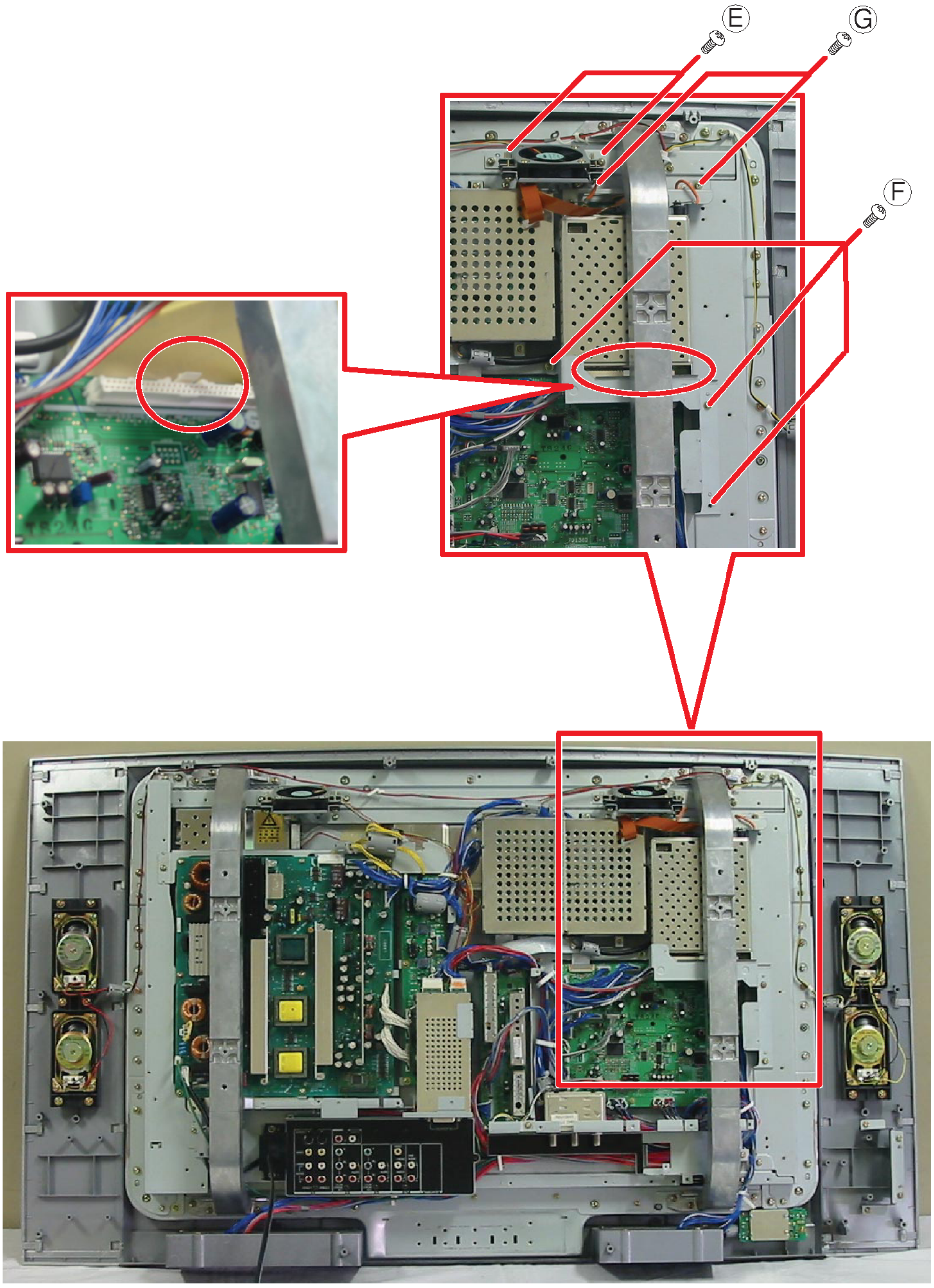
- Remove 29 screws (○ : 3X5).
- Remove 4 screws (□ : 4X12).



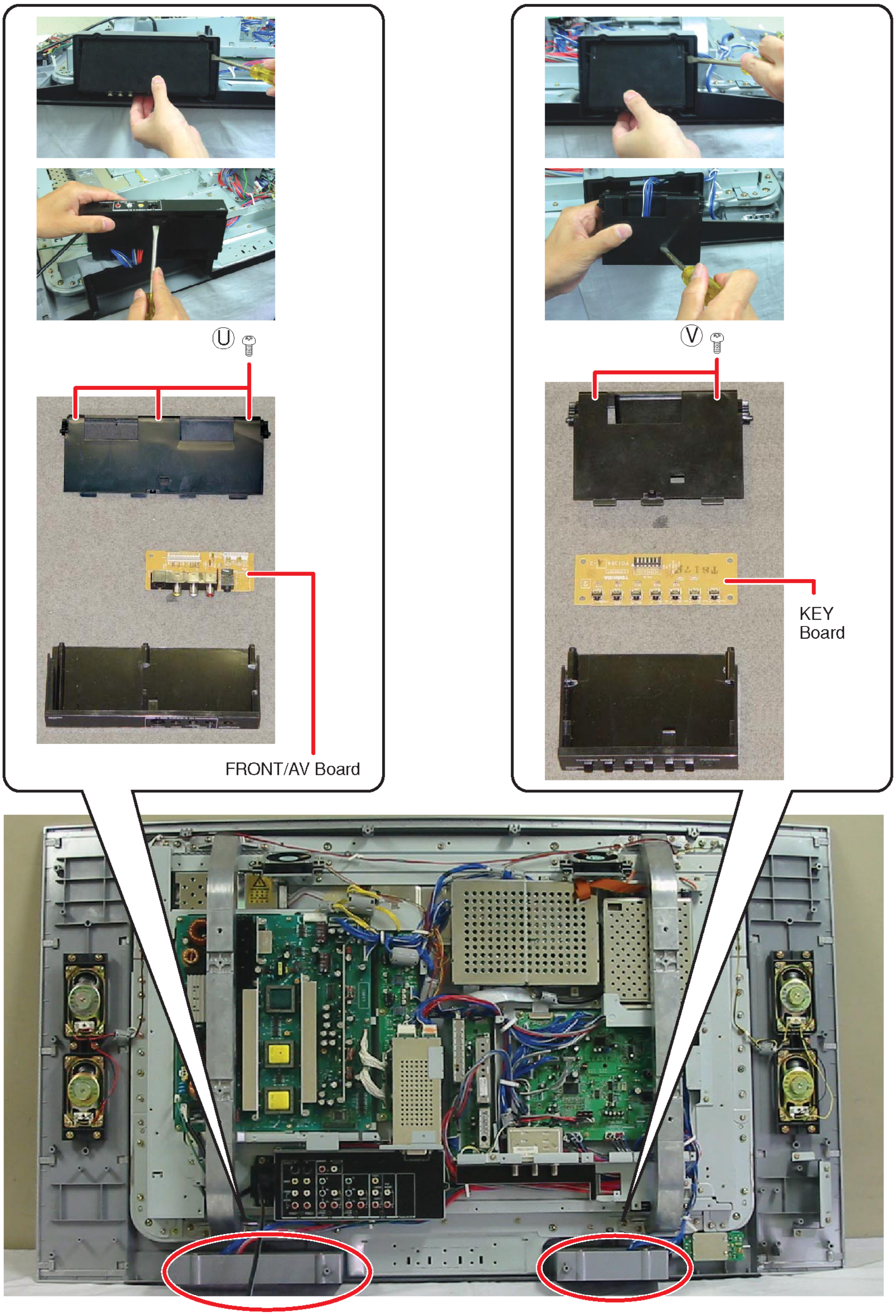


■ Removing the G-HYPER Module

- Remove the FAN. (2 screws Ⓔ)
- Remove the braket. (3 screws Ⓕ)
- Remove the 2 screws Ⓖ.

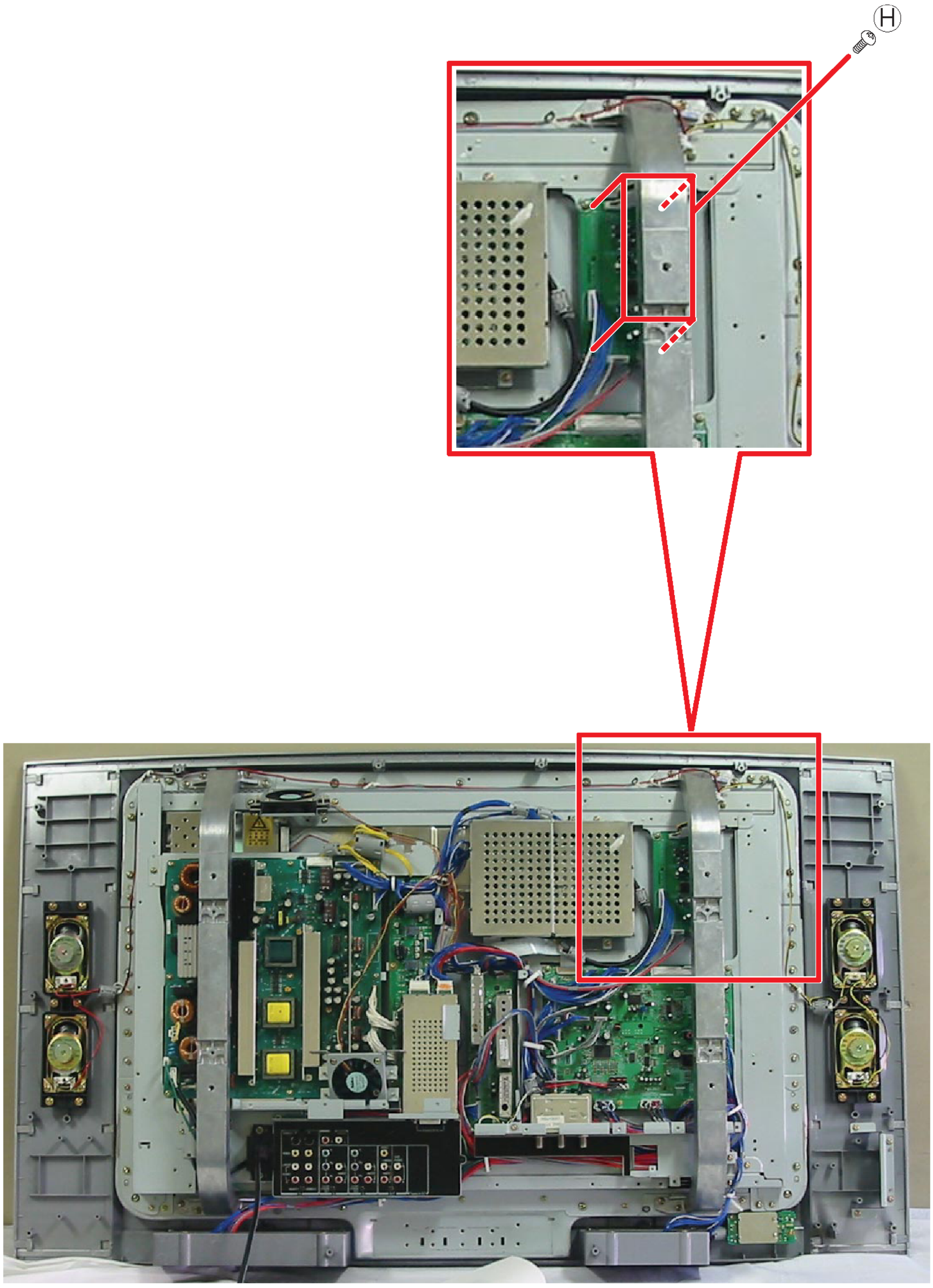


■ Removing the FRONT/AV board and KEY board


Ⓤ
Ⓥ
KEY Board
FRONT/AV Board

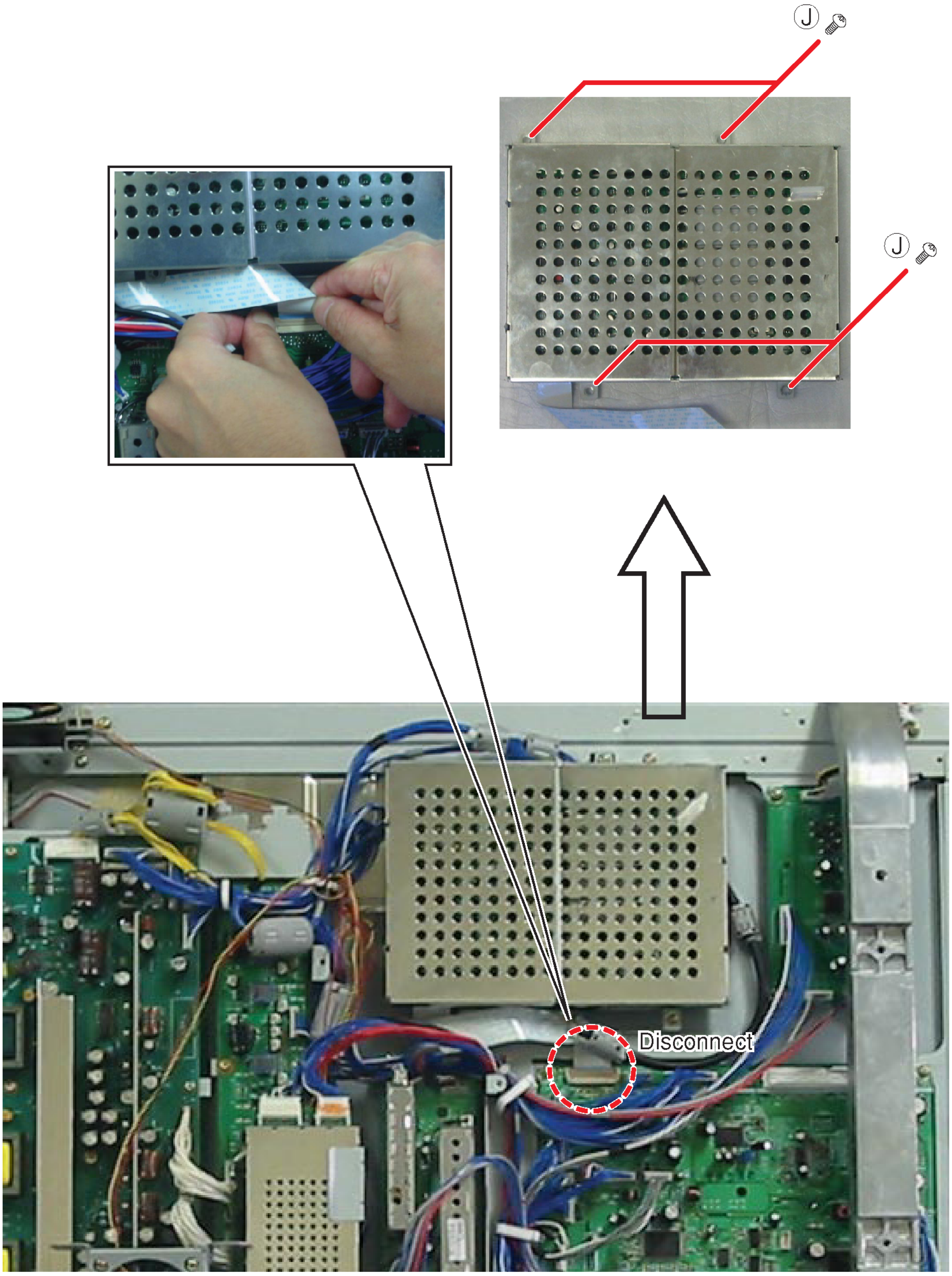
■ Removing the A-OUT board

- Remove 4 screws (Ⓗ).



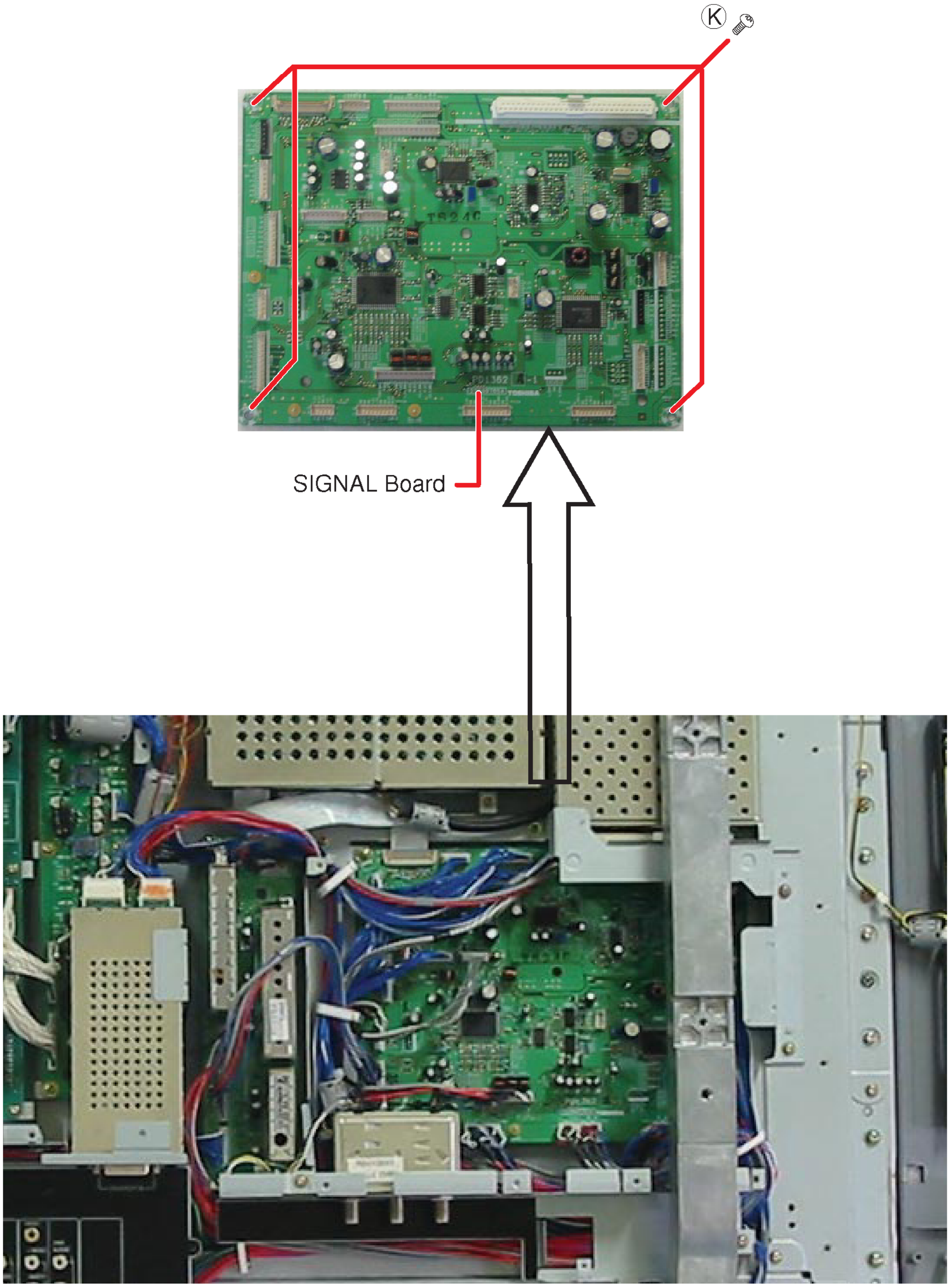
■ Removing the SCALER & OSD/MICON module

- Remove 4 screws (Ⓙ).
- Remove 3 connectors.


Ⓙ
Ⓙ
Disconnect

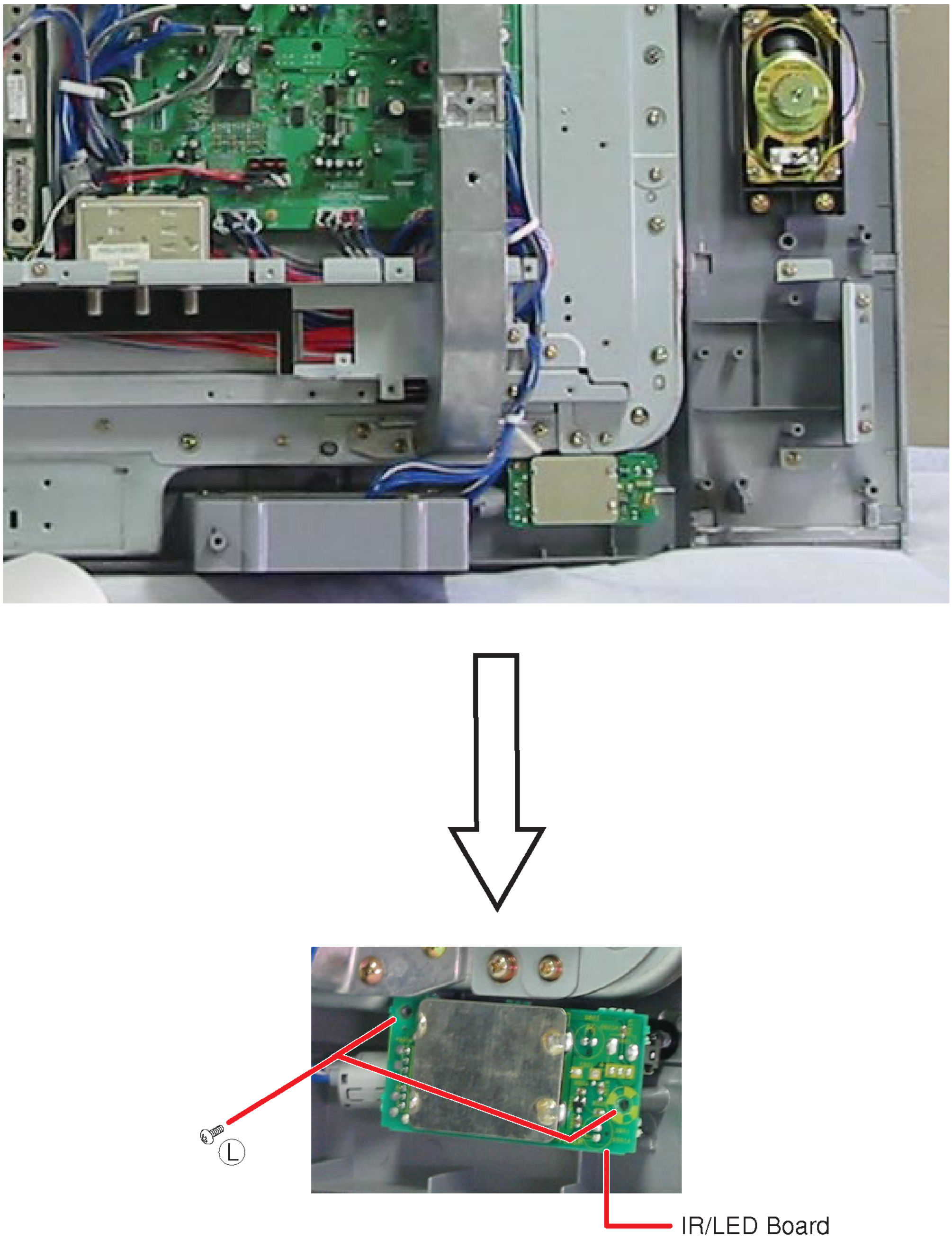
■ Removing the SIGNAL board

- Remove 4 screws (Ⓚ) on the SIGNAL board.


Ⓚ
SIGNAL Board

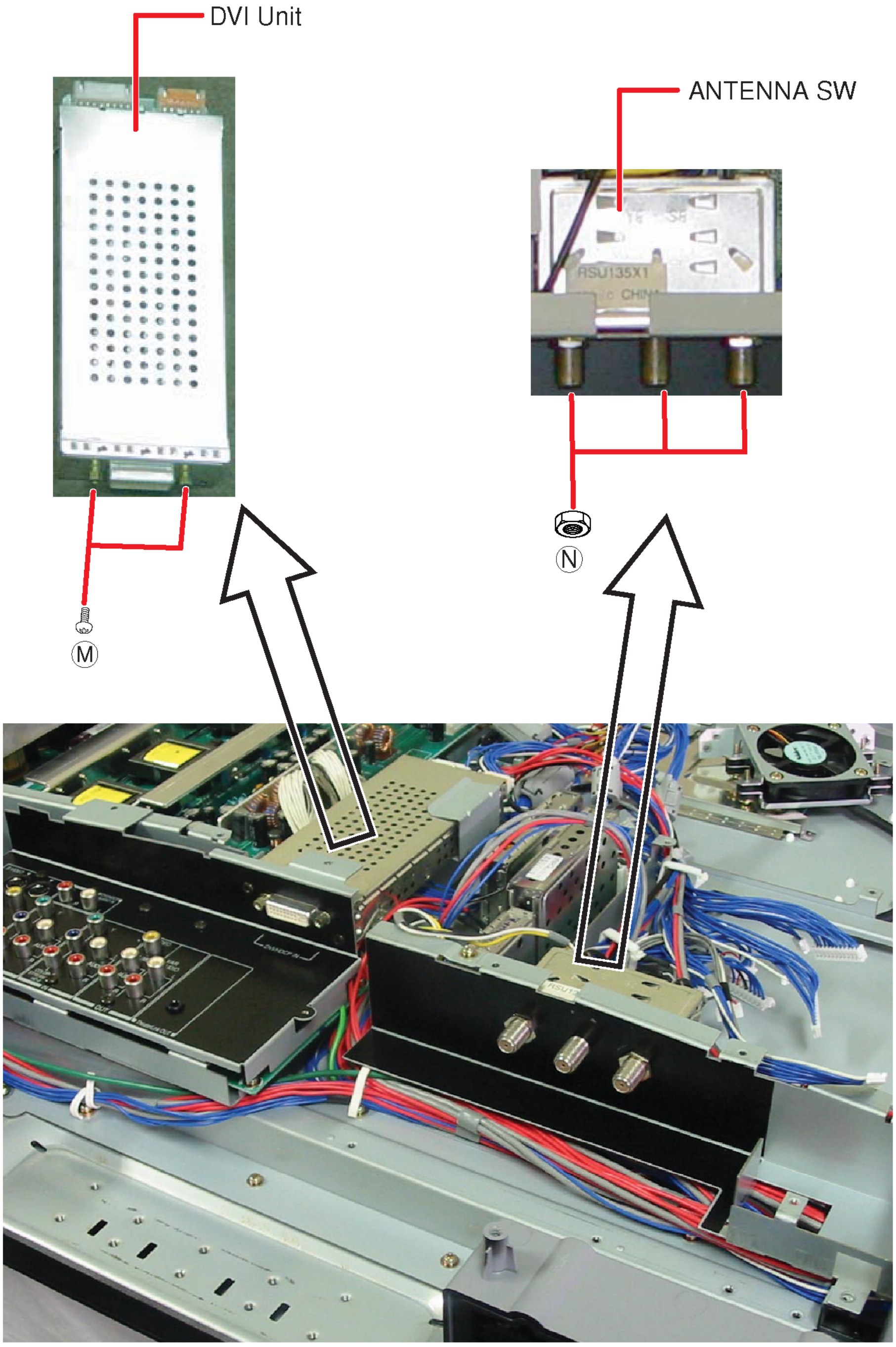
■ Removing the IR/LED board

- Remove 2 screws (Ⓛ) on the the IR/LED board.


Ⓛ
IR/LED Board

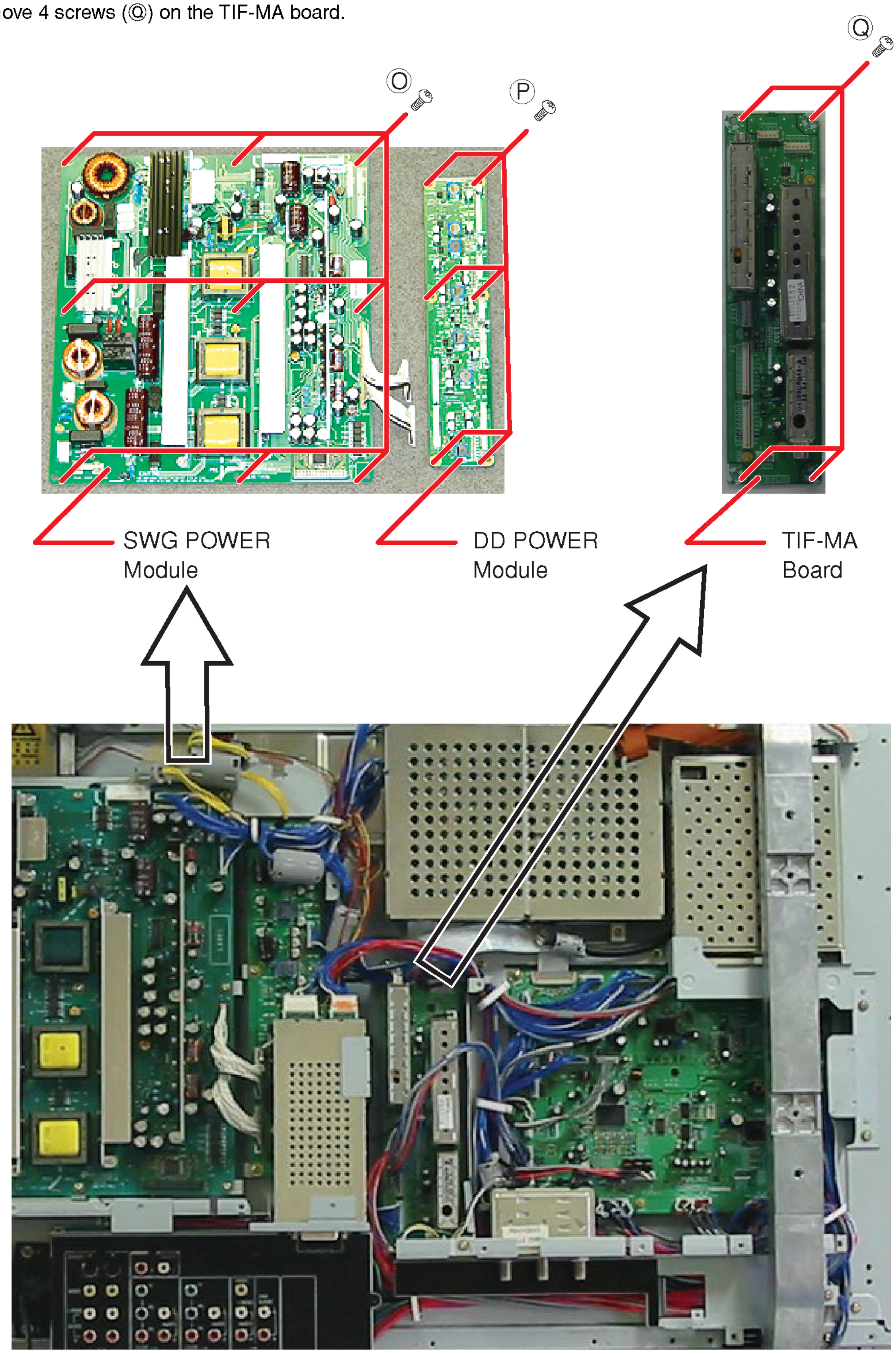
■ Removing the DVI Unit & ANTENNA SW board

- Remove 2 screws (Ⓜ) mounting the DVI Unit.
- Remove 3 nuts (Ⓝ) fixing the ANTENNA SW.


DVI Unit
ANTENNA SW
Ⓜ
Ⓝ

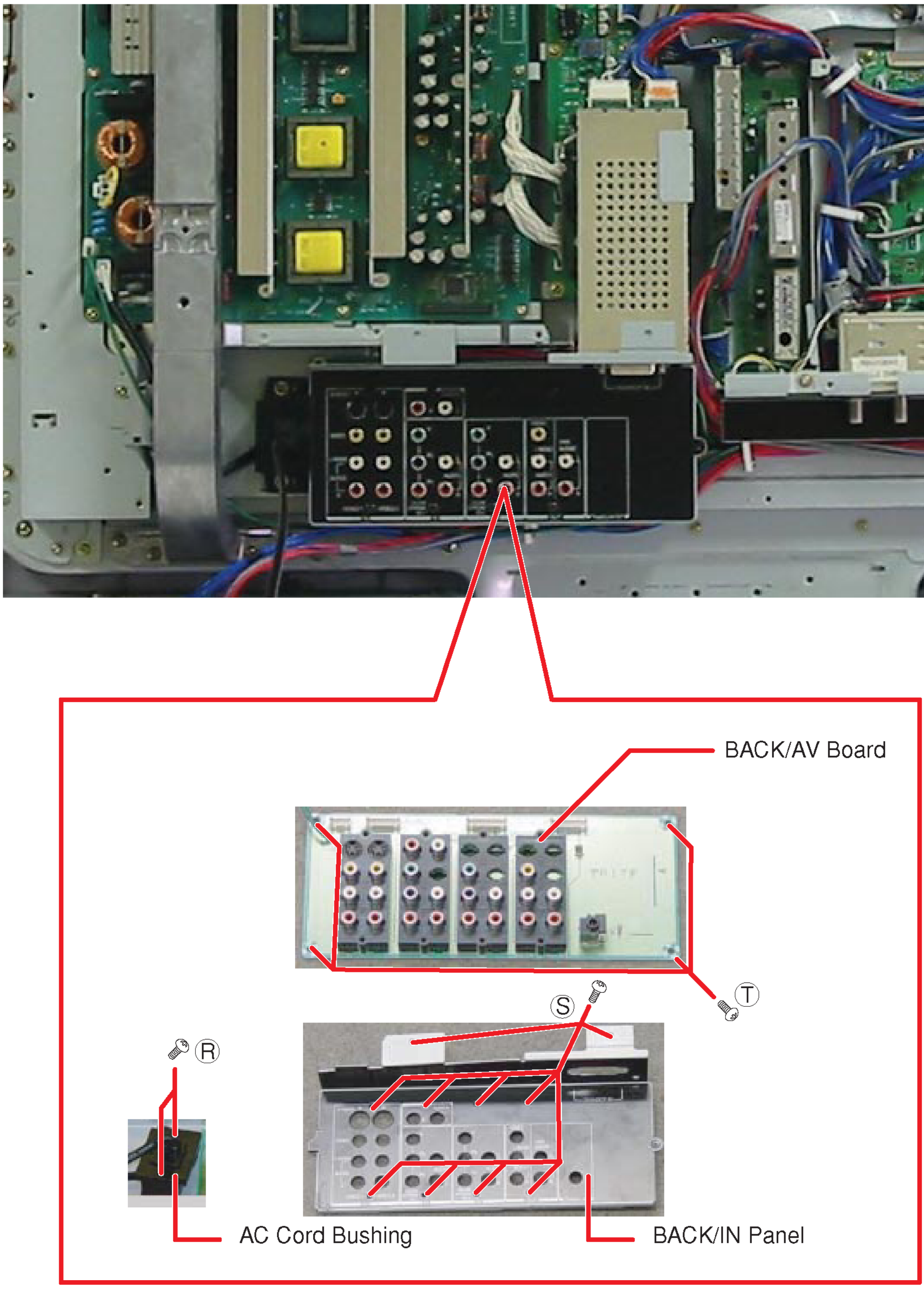
■ Removing the SWG POWER/DD POWER module & TIF-MA board

- Remove 9 screws (Ⓞ) ON THE SWG POWER module.
- Remove 6 screws (Ⓟ) on the DD POWER module.
- Remove 4 screws (Ⓠ) on the TIF-MA board.


Ⓞ
Ⓟ
Ⓠ
SWG POWER Module
DD POWER Module
TIF-MA Board

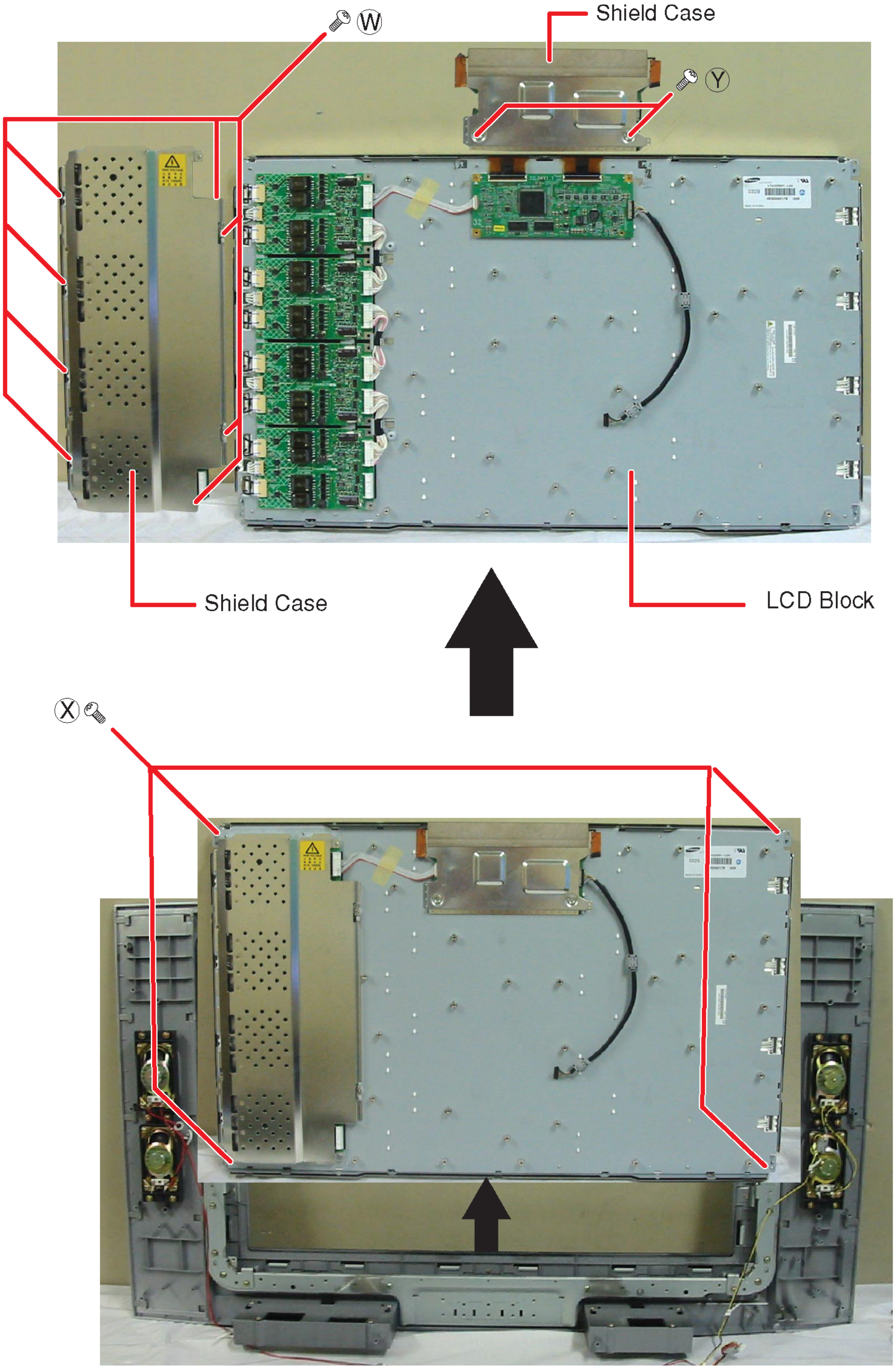
■ Removing the BACK/AV board

- Remove 2 screws (Ⓡ) fixing the AC cord bushing.
- Remove 10 screws (Ⓢ) on the BACK/AV panel.
- Remove 4 screws (Ⓣ) on the BACK/AV board.

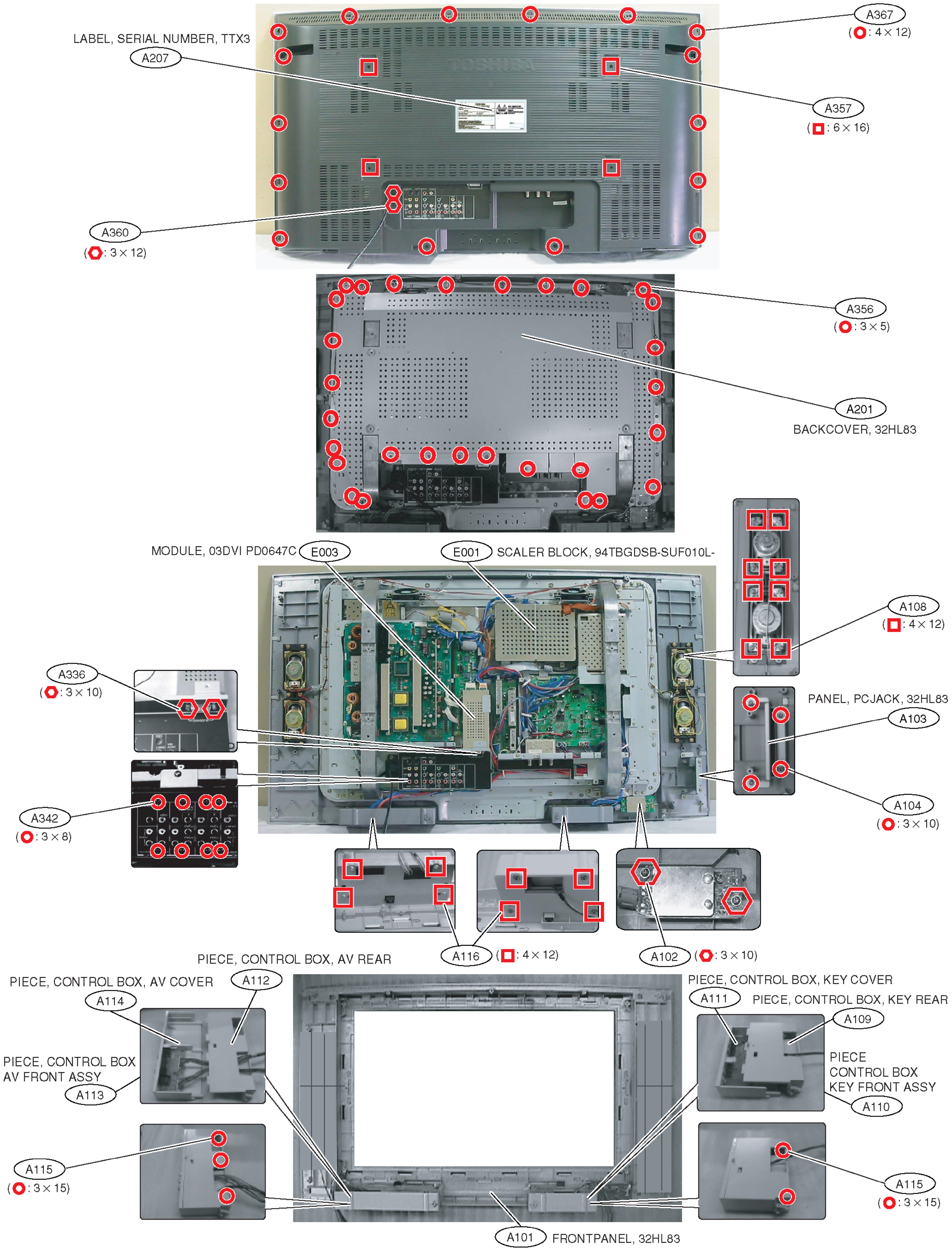

BACK/AV Board
Ⓢ
Ⓣ
Ⓡ
AC Cord Bushing
BACK/IN Panel

■ Removing the LCD block

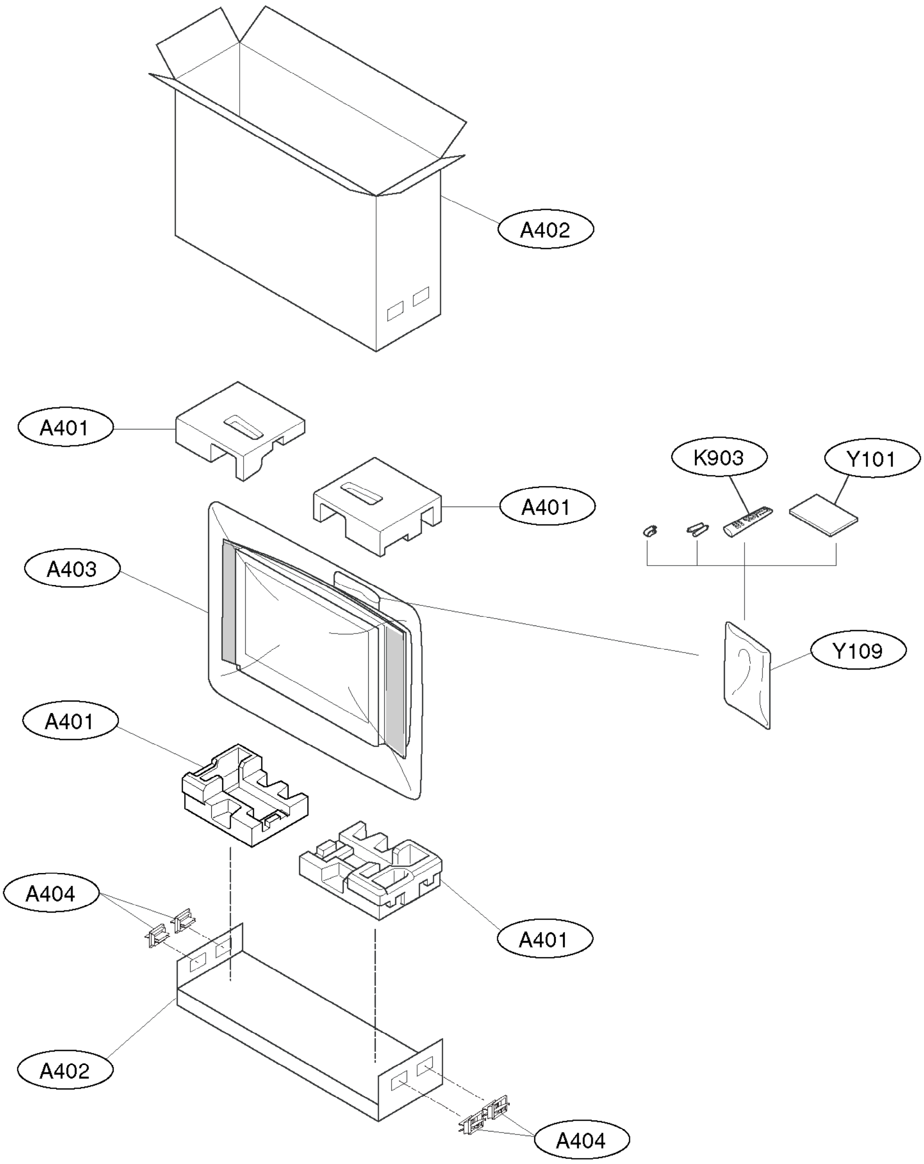
- Remove 4 screws (Ⓧ).


Ⓦ
Shield Case
Ⓨ
Shield Case
LCD Block
Ⓧ

EXPLODED VIEW


LABEL, SERIAL NUMBER, TTX3
A207
A367
(○ : 4 × 12)
A357
(□ : 6 × 16)
A360
(⬡ : 3 × 12)
A356
(○ : 3 × 5)
A201
BACKCOVER, 32HL83
MODULE, 03DVI PD0647C
E003
E001
SCALER BLOCK, 94TBGDSB-SUF010L-
A108
(□ : 4 × 12)
A336
(⬡ : 3 × 10)
PANEL, PCJACK, 32HL83
A103
A342
(○ : 3 × 8)
A104
(○ : 3 × 10)
PIECE, CONTROL BOX, AV REAR
A116
(□ : 4 × 12)
A102
(⬡ : 3 × 10)
PIECE, CONTROL BOX, AV COVER
A112
A114
PIECE, CONTROL BOX, KEY COVER
A111
PIECE, CONTROL BOX, KEY REAR
A109
PIECE, CONTROL BOX
AV FRONT ASSY
A113
PIECE
CONTROL BOX
KEY FRONT ASSY
A110
A115
(○ : 3 × 15)
A115
(○ : 3 × 15)
A101
FRONTPANEL, 32HL83

PACKING DISASSEMBLY


A402
A401
A401
K903
Y101
A403
Y109
A401
A404
A401
A402
A404

CHASSIS AND CABINET REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE “X-RAY RADIATION PRECAUTION”, “SAFETY PRECAUTION” AND “PRODUCT SAFETY NOTICE” ON PAGE 3 OF THIS MANUAL.

CAUTION: The international hazard symbols “⚠” in the schematic diagram and the parts list designate com-ponents which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE. Do not degrade the safety of the receiver through improper servicing.

NOTICE:

- *The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.*
- *The PC board assembly with ✻ mark is no longer available after the end of the production.*

Model : 32HL83

Capacitors .... CD : Ceramic Disk PF : Plastic Film EL : Electrolytic
Resistors .... CF : Carbon Film CC : Carbon Composition MF : Metal Film
OMF : Oxide Metal Film VR : Variable Resistor FR : Fusible Resistor

(All CD and PF capacitors are ±5%, 50V and all resistors, ±5%, 1/6W unless otherwise noted.)

Location No.	Parts No.	Description
CAPACITORS		
C102	24793221	ELECTROLYTIC, 10V 220UF M
C103	24109102	CERAMIC CHIP, 50V B 1000PF K
C104	24797479	ELECTROLYTIC, 50V 4.7UF M
C105	24763221	ELECTROLYTIC, 16V 220UF M
C108	24793221	ELECTROLYTIC, 10V 220UF M
C122	24092730	CERAMIC CHIP, 16V B 0.1UF K
C124	24109471	CERAMIC CHIP, 50V B 470PF K
C126	24109471	CERAMIC CHIP, 50V B 470PF K
C127	24763101	ELECTROLYTIC, 16V 100UF M
C131	24793221	ELECTROLYTIC, 10V 220UF M
C132	24763101	ELECTROLYTIC, 16V 100UF M
C133	24109102	CERAMIC CHIP, 50V B 1000PF K
C161	24109472	CERAMIC CHIP, 50V B 4700PF K
C162	24109472	CERAMIC CHIP, 50V B 4700PF K
C172	24669339	ELECTROLYTIC, 50V 3.3UF M
C522	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C523	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C524	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C601	24092730	CERAMIC CHIP, 16V B 0.1UF K
C602	24109331	CERAMIC CHIP, 50V B 330PF K
C603	24092730	CERAMIC CHIP, 16V B 0.1UF K
C604	24092611	CERAMIC CHIP, 6.3V B 2.2UF K
C605	24109102	CERAMIC CHIP, 50V B 1000PF K
C606	24109102	CERAMIC CHIP, 50V B 1000PF K
C608	24092730	CERAMIC CHIP, 16V B 0.1UF K
C610	24797010	ELECTROLYTIC, 50V 1UF M
C611	24092730	CERAMIC CHIP, 16V B 0.1UF K
C612	24761102	ELECTROLYTIC, 6.3V 1000UF M
C613	24797010	ELECTROLYTIC, 50V 1UF M
C614	24092730	CERAMIC CHIP, 16V B 0.1UF K
C615	24763101	ELECTROLYTIC, 16V 100UF M
C620	24092463	CERAMIC CHIP, 16V B 0.22UF K
C621	24092730	CERAMIC CHIP, 16V B 0.1UF K
C622	24092463	CERAMIC CHIP, 16V B 0.22UF K
C623	24092463	CERAMIC CHIP, 16V B 0.22UF K
C624	24092730	CERAMIC CHIP, 16V B 0.1UF K
C625	24092463	CERAMIC CHIP, 16V B 0.22UF K
C627	24092730	CERAMIC CHIP, 16V B 0.1UF K
C629	24797010	ELECTROLYTIC, 50V 1UF M
C630	24092730	CERAMIC CHIP, 16V B 0.1UF K
C631	24092463	CERAMIC CHIP, 16V B 0.22UF K
C632	24092463	CERAMIC CHIP, 16V B 0.22UF K
C635	24763221	ELECTROLYTIC, 16V 220UF M
C636	24763221	ELECTROLYTIC, 16V 220UF M
C640	24794102	ELECTROLYTIC, 16V 1000UF M
C641	24794470	ELECTROLYTIC, 16V 47UF M
C642	24794470	ELECTROLYTIC, 16V 47UF M
C645	24815103	CERAMIC CHIP, 50V B 10000PF K
C646	24092738	CERAMIC CHIP, 25V B 0.47UF K
C647	24092738	CERAMIC CHIP, 25V B 0.47UF K
C648	24285104	CERAMIC CHIP, 50V B 0.1UF K
C649	24285104	CERAMIC CHIP, 50V B 0.1UF K
C653	24797010	ELECTROLYTIC, 50V 1UF M
C659	24591102	PLASTIC FILM, 50V 1000PF J
C661	24109102	CERAMIC CHIP, 50V B 1000PF K
C662	24109102	CERAMIC CHIP, 50V B 1000PF K
C663	24206108	ELECTROLYTIC, 50V 0.1UF M 7L 3A
C665	24797339	ELECTROLYTIO, 50V 3.3UF M
C666	24797339	ELECTROLYTIO, 50V 3.3UF M
C667	24797478	ELECTROLYTIC, 50V 0.47UF M
C668	24797478	ELECTROLYTIC, 50V 0.47UF M
C669	24105221	CERAMIC CHIP, 50V CH 220PF J
C672	24797229	ELECTROLYTIC, 50V 2.2UF M
C673	24669229	ELECTROLYTIC, 50V 2.2UF M 3A
C677	24109681	CERAMIC CHIP, 50V B 680PF K
C678	24109681	CERAMIC CHIP, 50V B 680PF K
C679	24105221	CERAMIC CHIP, 50V CH 220PF J
C691	24109103	CERAMIC CHIP, 50V B 0.01UF K
C692	24109103	CERAMIC CHIP, 50V B 0.01UF K
C693	24109103	CERAMIC CHIP, 50V B 0.01UF K
C694	24109103	CERAMIC CHIP, 50V B 0.01UF K
C927	24092730	CERAMIC CHIP, 16V B 0.1UF K
C3301	24092538	CERAMIC CHIP, 10V F 1UF Z
C3302	24105102	CERAMIC CHIP, 25V CH 1000PF J
C3303	24092730	CERAMIC CHIP, 16V B 0.1UF K
C3304	24105471	CERAMIC CHIP, 50V CH 470PF J
C4702	24109223	CERAMIC CHIP, 25V B 0.022UF K

Location No.	Parts No.	Description
C4703	24073082	ELECTROLYTIC, 50V 2.2UF M 3A
C4704	24092753	CERAMIC CHIP, 10V B 0.22UF K
C4705	24073082	ELECTROLYTIC, 50V 2.2UF M 3A
C4706	24109221	CERAMIC CHIP, 50V B 220PF K
C4707	24092730	CERAMIC CHIP, 16V B 0.1UF K
C4708	24073041	ELECTROLYTIC, 16V 470UF M 3A
C4709	24109103	CERAMIC CHIP, 50V B 0.01UF K
C4710	24109103	CERAMIC CHIP, 50V B 0.01UF K
C4711	24109103	CERAMIC CHIP, 50V B 0.01UF K
C4712	24109103	CERAMIC CHIP, 50V B 0.01UF K
C4713	24109103	CERAMIC CHIP, 50V B 0.01UF K
C4714	24109103	CERAMIC CHIP, 50V B 0.01UF K
C4715	24109103	CERAMIC CHIP, 50V B 0.01UF K
C4716	24092730	CERAMIC CHIP, 16V B 0.1UF K
C4717	24073038	ELECTROLYTIC, 16V 100UF M 3A
CB01	24794470	ELECTROLYTIC, 16V 47UF M
CB40	24092538	CERAMIC CHIP, 10V F 1UF Z
CB41	24109222	CERAMIC CHIP, 50V B 2200PF K
CB42	24105561	CERAMIC CHIP, 50V CH 560PF J
CB43	24109332	CERAMIC CHIP, 50V B 3300PF K
CB45	24092538	CERAMIC CHIP, 10V F 1UF Z
CB46	24109222	CERAMIC CHIP, 50V B 2200PF K
CB47	24105561	CERAMIC CHIP, 50V CH 560PF J
CB51	24590103	PLASTIC FILM, 50V 0.01UF J
CB52	24794470	ELECTROLYTIC, 16V 47UF M
CB53	24503041	PLASTIC FILM, 63V 0.1UF J
CB54	24109221	CERAMIC CHIP, 50V B 220PF K
CB55	24797010	ELECTROLYTIC, 50V 1UF M
CB56	24794470	ELECTROLYTIC, 16V 47UF M
CB59	24590103	PLASTIC FILM, 50V 0.01UF J
CB60	24794100	ELECTROLYTIC, 16V 10UF M
CB61	24503041	PLASTIC FILM, 63V 0.1UF J
CC01	24109102	CERAMIC CHIP, 50V B 1000PF K
CC02	24109102	CERAMIC CHIP, 50V B 1000PF K
CC03	24109102	CERAMIC CHIP, 50V B 1000PF K
CC04	24109102	CERAMIC CHIP, 50V B 1000PF K
CC05	24109102	CERAMIC CHIP, 50V B 1000PF K
CC06	24109102	CERAMIC CHIP, 50V B 1000PF K
CC07	24109102	CERAMIC CHIP, 50V B 1000PF K
CC08	24109102	CERAMIC CHIP, 50V B 1000PF K
CC09	24109102	CERAMIC CHIP, 50V B 1000PF K
CC10	24109102	CERAMIC CHIP, 50V B 1000PF K
CC11	24109102	CERAMIC CHIP, 50V B 1000PF K
CC12	24109102	CERAMIC CHIP, 50V B 1000PF K
CC14	24109102	CERAMIC CHIP, 50V B 1000PF K
CC15	24109102	CERAMIC CHIP, 50V B 1000PF K
CC18	24109102	CERAMIC CHIP, 50V B 1000PF K
CC19	24109102	CERAMIC CHIP, 50V B 1000PF K
CC77	24105101	CERAMIC CHIP, 50V CH 100PF J
CC78	24105101	CERAMIC CHIP, 50V CH 100PF J
CC99	24591102	PLASTIC FILM, 50V 1000PF J
CS01	24092538	CERAMIC CHIP, 10V F 1UF Z
CS02	24092538	CERAMIC CHIP, 10V F 1UF Z
CS03	24092538	CERAMIC CHIP, 10V F 1UF Z
CS04	24092538	CERAMIC CHIP, 10V F 1UF Z
CS05	24092538	CERAMIC CHIP, 10V F 1UF Z
CS06	24092538	CERAMIC CHIP, 10V F 1UF Z
CS07	24092538	CERAMIC CHIP, 10V F 1UF Z
CS08	24092538	CERAMIC CHIP, 10V F 1UF Z
CS09	24092538	CERAMIC CHIP, 10V F 1UF Z
CS10	24092538	CERAMIC CHIP, 10V F 1UF Z
CS11	24092538	CERAMIC CHIP, 10V F 1UF Z
CS12	24092538	CERAMIC CHIP, 10V F 1UF Z
CS13	24794100	ELECTROLYTIC, 16V 10UF M
CS14	24794100	ELECTROLYTIC, 16V 10UF M

Location No.	Parts No.	Description
CS15	24092726	CERAMIC CHIPCK733B 16V 2,200,000PFK
CS16	24092726	CERAMIC CHIPCK733B 16V 2,200,000PFK
CS20	24669478	ELECTROLYTIC, 50V 0.47UF M 3A
CS21	24797479	ELECTROLYTIC, 50V 4.7UF M
CS22	24797479	ELECTROLYTIC, 50V 4.7UF M
CS23	24092538	CERAMIC CHIP, 10V F 1UF Z
CS24	24092538	CERAMIC CHIP, 10V F 1UF Z
CS25	24763101	ELECTROLYTIC, 16V 100UF M
CS26	24092726	CERAMIC CHIPCK733B 16V 2,200,000PFK
CS27	24092726	CERAMIC CHIPCK733B 16V 2,200,000PFK
CS30	24092726	CERAMIC CHIPCK733B 16V 2,200,000PFK
CS31	24092726	CERAMIC CHIPCK733B 16V 2,200,000PFK
CS34	24206010	ELECTROLYTIC, 50V 1.0UF M 7L 3A
CS35	24206010	ELECTROLYTIC, 50V 1.0UF M 7L 3A
CS39	24206010	ELECTROLYTIC, 50V 1.0UF M 7L 3A
CS51	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CS501	24092731	CERAMIC CHIP, 16V B 1UF K
CS502	24092726	CERAMIC CHIPCK733B 16V 2, 200, 000PFK
CS503	24092731	CERAMIC CHIP, 16V B 1UF K
CS504	24105101	CERAMIC CHIP, 50V CH 100PF J
CS505	24105101	CERAMIC CHIP, 50V CH 100PF J
CS510	24092542	CERAMIC CHIPCK733 B 16V 1.0UF K
CV01	24092621	CERAMIC CHIP, 10V B 1UF K
CV02	24092621	CERAMIC CHIP, 10V B 1UF K
CV03	24092621	CERAMIC CHIP, 10V B 1UF K
CV04	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV05	24092621	CERAMIC CHIP, 10V B 1UF K
CV06	24092621	CERAMIC CHIP, 10V B 1UF K
CV07	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV08	24794102	ELECTROLYTIC, 16V 1000UF M
CV09	24092621	CERAMIC CHIP, 10V B 1UF K
CV10	24794100	ELECTROLYTIC, 16V 10UF M
CV11	24092621	CERAMIC CHIP, 10V B 1UF K
CV12	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV13	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV14	24092621	CERAMIC CHIP, 10V B 1UF K
CV15	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV23	24794101	ELECTROLYTIC, 16V 100UF M
CV24	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV38	24109102	CERAMIC CHIP, 50V B 1000PF K
CV39	24109102	CERAMIC CHIP, 50V B 1000PF K
CV40	24794101	ELECTROLYTIC, 16V 100UF M
CV42	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV45	24092621	CERAMIC CHIP, 10V B 1UF K
CV46	24092621	CERAMIC CHIP, 10V B 1UF K
CV47	24092621	CERAMIC CHIP, 10V B 1UF K
CV48	24109332	CERAMIC CHIP, 50V B 3300PF K
CV64	24794471	ELECTROLYTIC, 16V 470UF M
CV65	24794101	ELECTROLYTIC, 16V 100UF M
CV66	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV67	24794100	ELECTROLYTIC, 16V 10UF M
CV68	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV73	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV79	24794102	ELECTROLYTIC, 16V 1000UF M
CV80	24793222	ELECTROLYTIC, 10V 2200UF M
CV121	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV201	24203101	ELECTROLYTIC, 16V 100UF M 7L 3A
CV202	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV203	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV204	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV205	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV237	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV238	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV239	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV243	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A

Location No.	Parts No.	Description
CV244	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV245	24092441	CERAMIC CHIP, 16V F 1UF Z
CV246	24092441	CERAMIC CHIP, 16V F 1UF Z
CV247	24092441	CERAMIC CHIP, 16V F 1UF Z
CV248	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV249	24092441	CERAMIC CHIP, 16V F 1UF Z
CV250	24092441	CERAMIC CHIP, 16V F 1UF Z
CV251	24092441	CERAMIC CHIP, 16V F 1UF Z
CV252	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV253	24092441	CERAMIC CHIP, 16V F 1UF Z
CV254	24092441	CERAMIC CHIP, 16V F 1UF Z
CV255	24092441	CERAMIC CHIP, 16V F 1UF Z
CV256	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV257	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CV258	24794102	ELECTROLYTIC, 16V 1000UF M
CV259	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV261	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV263	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY101	24092441	CERAMIC CHIP, 16V F 1UF Z
CY102	24794101	ELECTROLYTIC, 16V 100UF M
CY103	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CY104	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY105	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY106	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY107	24794100	ELECTROLYTIC, 16V 10UF M
CY108	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CY109	24105101	CERAMIC CHIP, 50V CH 100PF J
CY111	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY112	24105181	CERAMIC CHIP, 50V CH 180PF J
CY113	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY114	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY115	24105390	CERAMIC CHIP, 50V CH 39PF J
CY116	24105470	CERAMIC CHIP, 50V CH 47PF J
CY117	24105180	CERAMIC CHIP, 50V CH 18PF J
CY501	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY502	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY504	24109222	CERAMIC CHIP, 50V B 2200PF K
CY505	24105120	CERAMIC CHIP, 50V CH 12PF J
CY506	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY508	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY512	24092463	CERAMIC CHIP, 16V B 0.22UF K
CY513	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY514	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY515	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY516	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY517	24092731	CERAMIC CHIP, 16V B 1UF K
CY524	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY525	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY526	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY538	24794102	ELECTROLYTIC, 16V 1000UF M
CY539	24794102	ELECTROLYTIC, 16V 1000UF M
CY582	24105101	CERAMIC CHIP, 50V CH 100PF J
CY650	24591102	PLASTIC FILM, 50V 1000PF J
CY651	24591102	PLASTIC FILM, 50V 1000PF J
CY652	24591102	PLASTIC FILM, 50V 1000PF J

RESISTORS

Location No.	Parts No.	Description
R102	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R103	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R104	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R110	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R120	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R121	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R131	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R132	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R133	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R134	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R135	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
R150	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R151	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
R152	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R264	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
R265	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
R266	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
R286	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
R287	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
R288	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
R563	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R601	24554470	OXIDE METAL FILM, 2W 47 OHM J
R604	24000606	CHIP, METAL FILM, 1/16W 8.2K OHM F
R609	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
R610	24011124	CHIP, METAL FILM, 1/20W 120K OHM J
R611	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R612	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
R613	24011124	CHIP, METAL FILM, 1/20W 120K OHM J
R614	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R615	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R616	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R617	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R618	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R619	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R620	24871100	CHIP, METAL FILM, 1/8W 10 OHM J
R623	24871100	CHIP, METAL FILM, 1/8W 10 OHM J
R630	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R631	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R640	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R641	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R642	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R645	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R646	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R650	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R652	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R655	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R660	24011563	CHIP, METAL FILM, 1/20W 56K OHM J
R661	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R662	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R667	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R670	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R671	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R672	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R673	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R674	24011563	CHIP, METAL FILM, 1/20W 56K OHM J
R676	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R677	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R678	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R679	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R686	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R687	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R688	24366151	CARBON FILM, 1/6W 150 OHM J
R690	24366151	CARBON FILM, 1/6W 150 OHM J
R929	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R3301	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R3302	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R3303	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R3304	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R3305	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R3306	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
R3307	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R3308	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4701	24011361	CHIP, METAL FILM, 1/20W 360 OHM J

Location No.	Parts No.	Description
R4702	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
R4704	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4705	24011474	CHIP, METAL FILM, 1/20W 470K OHM J
R4708	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4709	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R4710	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4711	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4712	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4714	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4715	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4716	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4717	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA71	24366273	CARBON FILM, 1/6W 27K OHM J
RA72	24366153	CARBON FILM, 1/6W 15K OHM J
RA73	24366822	CARBON FILM, 1/6W 8.2K OHM J
RA75	24366822	CARBON FILM, 1/6W 8.2K OHM J
RA76	24366153	CARBON FILM, 1/6W 15K OHM J
RB01	24011391	CHIP, METAL FILM, 1/20W 390 OHM J
RB04	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RB05	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB15	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RB19	24011470	CHIP, METAL FILM, 1/20W 47 OHM J
RB37	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RB38	24011105	CHIP, METAL FILM, 1/20W 1M OHM J
RB39	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB40	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB41	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB42	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB43	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RB44	24011105	CHIP, METAL FILM, 1/20W 1M OHM J
RB45	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB46	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB47	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB48	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB51	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
RB52	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB53	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB54	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB55	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
RB56	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
RB57	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB58	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB59	24011122	CHIP, METAL FILM, 1/20W 1.2K OHM J
RB60	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
RB62	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RB63	24011271	CHIP, METAL FILM, 1/20W 270 OHM J
RB67	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RB69	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RB70	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RB71	24019112	CHIP, METAL FILM, 1/8W 1 OHM F
RB72	24011220	CHIP, METAL FILM, 1/20W 22 OHM J
RB73	24011560	CHIP, METAL FILM, 1/20W 56 OHM J
RC01	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC02	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC03	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC04	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC05	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC06	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC07	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC08	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC11	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC12	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC15	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC16	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RS01	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J

Location No.	Parts No.	Description
RS02	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS03	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS04	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS05	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS06	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS07	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS08	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS09	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS10	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS11	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS12	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS13	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RS14	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RS15	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS16	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS17	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS18	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS19	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS20	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS21	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RS22	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RS25	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS26	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS27	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS28	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS29	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS30	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS31	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS32	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS33	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS34	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS35	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS36	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RS37	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS38	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS39	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS40	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS41	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS42	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS44	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS45	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS46	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS47	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS48	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS49	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS50	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS51	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RS52	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RS53	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS54	24011563	CHIP, METAL FILM, 1/20W 56K OHM J
RS55	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS56	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS57	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS58	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS59	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS60	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS61	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS62	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS63	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS64	24011393	CHIP, METAL FILM, 1/20W 39K OHM J
RS65	24011563	CHIP, METAL FILM, 1/20W 56K OHM J
RS66	24011393	CHIP, METAL FILM, 1/20W 39K OHM J
RS67	24011563	CHIP, METAL FILM, 1/20W 56K OHM J
RS74	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS75	24011224	CHIP, METAL FILM, 1/20W 220K OHM J

Location No.	Parts No.	Description
RS76	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS79	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS80	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS103	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS112	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS116	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS500	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS501	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS504	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS505	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS506	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RS507	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RS515	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RS516	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS517	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RV01	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV03	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV06	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV07	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV08	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV09	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV10	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV11	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV12	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV14	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RV15	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV17	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV19	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV20	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV21	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV26	24011561	CHIP, METAL FILM, 1/20W 560 OHM J
RV27	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV29	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
RV30	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV33	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV34	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV35	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV36	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV37	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV40	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV41	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV60	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV61	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV62	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV66	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV70	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV71	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV72	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV73	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV74	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV75	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV76	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RV77	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV78	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV79	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RV89	24000445	CHIP JUMPER, 1608TYPE
RV90	24000445	CHIP JUMPER, 1608TYPE
RV91	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV92	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV93	24011470	CHIP, METAL FILM, 1/20W 47 OHM J
RV94	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV98	24000445	CHIP JUMPER, 1608TYPE
RV99	24000445	CHIP JUMPER, 1608TYPE
RV100	24000445	CHIP JUMPER, 1608TYPE
RV101	24000445	CHIP JUMPER, 1608TYPE

Location No.	Parts No.	Description
RV120	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV121	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV122	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV129	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV250	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RV251	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RV252	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV253	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV254	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV255	24871561	CHIP, METAL FILM, 1/8W 560 OHM J
RV256	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV257	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV258	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV259	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV260	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV261	24871561	CHIP, METAL FILM, 1/8W 560 OHM J
RV262	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RV263	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RV264	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV265	24871681	CHIP, METAL FILM, 1/8W 680 OHM J
RV266	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV267	24871681	CHIP, METAL FILM, 1/8W 680 OHM J
RV323	24872101	CHIP, METAL FILM, 1/16W 100 OHM J
RV324	24872101	CHIP, METAL FILM, 1/16W 100 OHM J
RV325	24872101	CHIP, METAL FILM, 1/16W 100 OHM J
RV330	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV331	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV332	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV337	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV338	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV346	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV347	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV348	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV351	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV352	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV353	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV354	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV355	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV356	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV357	24000445	CHIP JUMPER, 1608TYPE
RV358	24000445	CHIP JUMPER, 1608TYPE
RV359	24000445	CHIP JUMPER, 1608TYPE
RV368	24000445	CHIP JUMPER, 1608TYPE
RV369	24000445	CHIP JUMPER, 1608TYPE
RV370	24000445	CHIP JUMPER, 1608TYPE
RV371	24000445	CHIP JUMPER, 1608TYPE
RV372	24000445	CHIP JUMPER, 1608TYPE
RV373	24000445	CHIP JUMPER, 1608TYPE
RV374	24000445	CHIP JUMPER, 1608TYPE
RV375	24000445	CHIP JUMPER, 1608TYPE
RY101	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY102	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RY103	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY104	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY105	24011821	CHIP, METAL FILM, 1/20W 820 OHM J
RY106	24000445	CHIP JUMPER, 1608TYPE
RY107	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY109	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RY110	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY501	24011303	CHIP, METAL FILM, 1/20W 30K OHM J
RY502	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RY503	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RY504	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RY505	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RY507	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J

Location No.	Parts No.	Description
RY508	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY509	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RY510	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY511	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY512	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY513	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY516	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY517	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY518	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY519	24000445	CHIP JUMPER, 1608TYPE
RY520	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY521	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY523	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY524	24011821	CHIP, METAL FILM, 1/20W 820 OHM J
RY525	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY526	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY527	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY528	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY529	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY530	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY531	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY532	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY533	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY534	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY539	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RY540	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RY541	24011682	CHIP, METAL FILM, 1/20W 6.8K OHM J
RY542	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RY543	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY545	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY548	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY550	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RY551	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RY552	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY553	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RY554	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RY555	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RY560	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RY561	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RY562	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY573	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RY575	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RY576	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RY585	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RY590	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RY591	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY592	24011101	CHIP, METAL FILM, 1/20W 100 OHM J

COILS & TRANFORMERS

Location No.	Parts No.	Description
L101	23289845	COIL, PEAKING, TRF4680AT
L134	23289845	COIL, PEAKING, TRF4680AT
L289	23248073	COIL, CHOKE, TLN3299D
L620	23246406	COIL, CHOKE, TLN3528AF
L622	23246406	COIL, CHOKE, TLN3528AF
L623	23246406	COIL, CHOKE, TLN3528AF
L625	23246406	COIL, CHOKE, TLN3528AF
L640	23289109	COIL, PEAKING, TRF41R0AF
L645	23103238	INDUCTOR, BEADTEM2142AD
L655	23103233	INDUCTOR, BEADTEM2137AD
L4702	23103827	INDUCTOR, BEAD, TEM2120M
LB51	23246004	COIL, CHIP-INDUCTER-R10MMHJ TRF4R10CC
LC01	23103828	INDUCTOR, BEAD, TEM2121M
LC02	23103828	INDUCTOR, BEAD, TEM2121M
LC03	23103828	INDUCTOR, BEAD, TEM2121M
LC04	23103828	INDUCTOR, BEAD, TEM2121M

Location No.	Parts No.	Description
LV01	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV02	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV03	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV04	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV09	23289840	COIL, PEAKING, TRF4100AT
LV13	23289840	COIL, PEAKING, TRF4100AT
LV42	23289840	COIL, PEAKING, TRF4100AT
LV72	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV201	23289844	COIL, PEAKING, TRF4470AT
LV251	23103852	COIL, FILTER, TEM2028AH
LV252	23103852	COIL, FILTER, TEM2028AH
LV253	23103852	COIL, FILTER, TEM2028AH
LV270	23289840	COIL, PEAKING, TRF4100AT
LV271	23103146	EMI FILTER, TEM2030AA
LY012	23246398	COIL, CHIP INDUCTOR 10MMH K COLTRF4100CV
LY100	23246405	COIL, CHIP INDUCTOR 33MMH J COLTRF4330CW
LY101	23103827	INDUCTOR, BEAD, TEM2120M
LY102	23103827	INDUCTOR, BEAD, TEM2120M
LY103	23103230	INDUCTOR, BEAD, TEM2134AD
LY104	23246404	COIL, CHIP INDUCTOR 15MMH J COLTRF4150CW
LY105	23246222	COIL, CHIP INDUCTOR, TRF4270CG
LY112	23103230	INDUCTOR, BEAD, TEM2134AD
LY501	23246398	COIL, CHIP INDUCTOR 10MMH K COLTRF4100CV

SEMICONDUCTORS

Location No.	Parts No.	Description
Q131	23314204	TRANSISTOR, 2SC2412K, Q
Q151	23314994	TRANSISTOR, 2SA1576A106
Q152	23314993	TRANSISTOR, 2SC4081 Q
Q610	23009368	IC, TA2024(T)
Q612	23314163	TRANSISTOR, 2SA1162-Y
Q615	23114493	TRANSISTOR, RN2404
Q620	23314475	TRANSISTOR, 2SC2712-Y
Q630	23009042	IC, LA4525
Q671	70114396	TRANSISTOR, 2SC3326B
Q672	70114396	TRANSISTOR, 2SC3326B
Q675	70114396	TRANSISTOR, 2SC3326B
Q676	70114396	TRANSISTOR, 2SC3326B
Q677	23114493	TRANSISTOR, RN2404
Q678	23314475	TRANSISTOR, 2SC2712-Y
Q679	23314475	TRANSISTOR, 2SC2712-Y
Q680	23314475	TRANSISTOR, 2SC2712-Y
Q922	70129444	IC, PST994D
Q3301	23906164	IC, TA75S393F
Q3302	23205014	TRANSISTOR, 2SC4667-O
Q4701	23906335	IC, TA1270AF(J)
Q4702	23314289	TRANSISTOR, 2SA1586-Y
Q4703	23314289	TRANSISTOR, 2SA1586-Y
QB01	23314475	TRANSISTOR, 2SC2712-Y
QB44	23205112	TRANSISTOR, 2SA1980UF-Y
QB45	23314993	TRANSISTOR, 2SC4081 Q
QB46	23205112	TRANSISTOR, 2SA1980UF-Y
QB47	23314993	TRANSISTOR, 2SC4081 Q
QB51	23319808	IC, M5218AP
QB52	23314475	TRANSISTOR, 2SC2712-Y
QB53	23314994	TRANSISTOR, 2SA1576A106
QB54	23314994	TRANSISTOR, 2SA1576A106
QS03	23314993	TRANSISTOR, 2SC4081 Q
QS04	23314993	TRANSISTOR, 2SC4081 Q
QS05	23009613	IC, CD4052BNSR
QS06	23009613	IC, CD4052BNSR
QS07	70114396	TRANSISTOR, 2SC3326B
QS08	70114396	TRANSISTOR, 2SC3326B
QS09	23114493	TRANSISTOR, RN2404
QS10	23904896	IC, JLC1562BF
QS11	23114499	TRANSISTOR, RN1404

Location No.	Parts No.	Description
QS12	23114499	TRANSISTOR, RN1404
QS13	23114499	TRANSISTOR, RN1404
QS14	23114499	TRANSISTOR, RN1404
QS15	23314993	TRANSISTOR, 2SC4081 Q
QS16	23114493	TRANSISTOR, RN2404
QS17	70114396	TRANSISTOR, 2SC3326B
QS18	70114396	TRANSISTOR, 2SC3326B
QS102	23318820	IC, OPE AMP, BA10358F
QV01	23906887	IC, CXA2069Q
QV04	23314993	TRANSISTOR, 2SC4081 Q
QV06	23314994	TRANSISTOR, 2SA1576A106
QV09	23314994	TRANSISTOR, 2SA1576A106
QV12	23009418	IC, 2IN-1OUTSW DRIVERMM1505XNRE
QV13	23314993	TRANSISTOR, 2SC4081 Q
QV70	23314993	TRANSISTOR, 2SC4081 Q
QV71	23314993	TRANSISTOR, 2SC4081 Q
QV72	23314994	TRANSISTOR, 2SA1576A106
QV73	23314994	TRANSISTOR, 2SA1576A106
QV201	23314475	TRANSISTOR, 2SC2712-Y
QV202	23314475	TRANSISTOR, 2SC2712-Y
QV246	23205045	TRANSISTOR, 2SA1037AKQ
QV247	23314475	TRANSISTOR, 2SC2712-Y
QV248	23205045	TRANSISTOR, 2SA1037AKQ
QV249	23314475	TRANSISTOR, 2SC2712-Y
QV254	23000360	IC, MM1519XQ
QY100	23906515	IC, TC90A45F
QY101	23314993	TRANSISTOR, 2SC4081 Q
QY102	23314993	TRANSISTOR, 2SC4081 Q
QY103	23314994	TRANSISTOR, 2SA1576A106
QY501	23000812	IC, TA1340F
QY502	23205014	TRANSISTOR, 2SC4667-O
QY503	23314994	TRANSISTOR, 2SA1576A106
QY504	23314994	TRANSISTOR, 2SA1576A106
QY507	23314993	TRANSISTOR, 2SC4081 Q
QY508	23314993	TRANSISTOR, 2SC4081 Q
QY509	23314993	TRANSISTOR, 2SC4081 Q
QY511	23314994	TRANSISTOR, 2SA1576A106
QY512	23314994	TRANSISTOR, 2SA1576A106
QY513	23314994	TRANSISTOR, 2SA1576A106
QY514	23314994	TRANSISTOR, 2SA1576A106
QY515	23314994	TRANSISTOR, 2SA1576A106
QY516	23314994	TRANSISTOR, 2SA1576A106
QY518	23314993	TRANSISTOR, 2SC4081 Q
QY520	23314993	TRANSISTOR, 2SC4081 Q
D608	23316591	DIODE, ZENER, MA8100-M
D611	23316231	DIODE, 1SS355
D612	23316231	DIODE, 1SS355
D613	23316231	DIODE, 1SS355
D614	23316231	DIODE, 1SS355
D615	23316231	DIODE, 1SS355
D616	23316231	DIODE, 1SS355
D617	23316231	DIODE, 1SS355
D620	23316231	DIODE, 1SS355
D621	23316231	DIODE, 1SS355
D622	23316231	DIODE, 1SS355
D623	23316231	DIODE, 1SS355
D624	23316231	DIODE, 1SS355
D625	23316231	DIODE, 1SS355
D626	23316231	DIODE, 1SS355
D627	23316231	DIODE, 1SS355
D628	23316231	DIODE, 1SS355
D629	23316231	DIODE, 1SS355
D640	23316231	DIODE, 1SS355
D641	23316231	DIODE, 1SS355
D642	23316231	DIODE, 1SS355

Location No.	Parts No.	Description
D643	23316231	DIODE, 1SS355
D646	23316231	DIODE, 1SS355
D656	23316604	DIODE, ZENER, MA8150-M, TX
D657	23316573	DIODE, ZENER, MA8062-L
D672	23316231	DIODE, 1SS355
D673	23316231	DIODE, 1SS355
DB01	23358564	DIODE, LED, SLR-56VC3FPQ
DB01A	23528275	HOLDER, LED PWR, 14LS10
DB03	23358522	DIODE, LED, SIR-56SB3F
DB03A	23528275	HOLDER, LED PWR, 14LS10
DB51	23358573	PHOTO DIODE, PIN 940NMHPI-2FER4
DB52	23118041	DIODE, MA111
DB54	23118041	DIODE, MA111
DB76	23118041	DIODE, MA111
DE99	23118096	DIODE, RK34
DS102	23316571	DIODE, ZENER, MA8056-M
DV02	23316587	DIODE, ZENER, MA8091-L
DV03	23316587	DIODE, ZENER, MA8091-L
DV05	23316587	DIODE, ZENER, MA8091-L
DV07	23316577	DIODE, ZENER, MA8068-M
DV10	23316587	DIODE, ZENER, MA8091-L
DV11	23316587	DIODE, ZENER, MA8091-L
DV14	23316577	DIODE, ZENER, MA8068-M
DV19	23316587	DIODE, ZENER, MA8091-L
DV21	23316577	DIODE, ZENER, MA8068-M
DV241	23316587	DIODE, ZENER, MA8091-L
DV242	23316587	DIODE, ZENER, MA8091-L
DV243	23316587	DIODE, ZENER, MA8091-L
DV244	23316587	DIODE, ZENER, MA8091-L
DV249	23316587	DIODE, ZENER, MA8091-L
DV250	23316587	DIODE, ZENER, MA8091-L
DV251	23316577	DIODE, ZENER, MA8068-M
DV252	23316577	DIODE, ZENER, MA8068-M
DV256	23316587	DIODE, ZENER, MA8091-L
DV257	23316587	DIODE, ZENER, MA8091-L
DV258	23316587	DIODE, ZENER, MA8091-L

MISCELLANEOUS

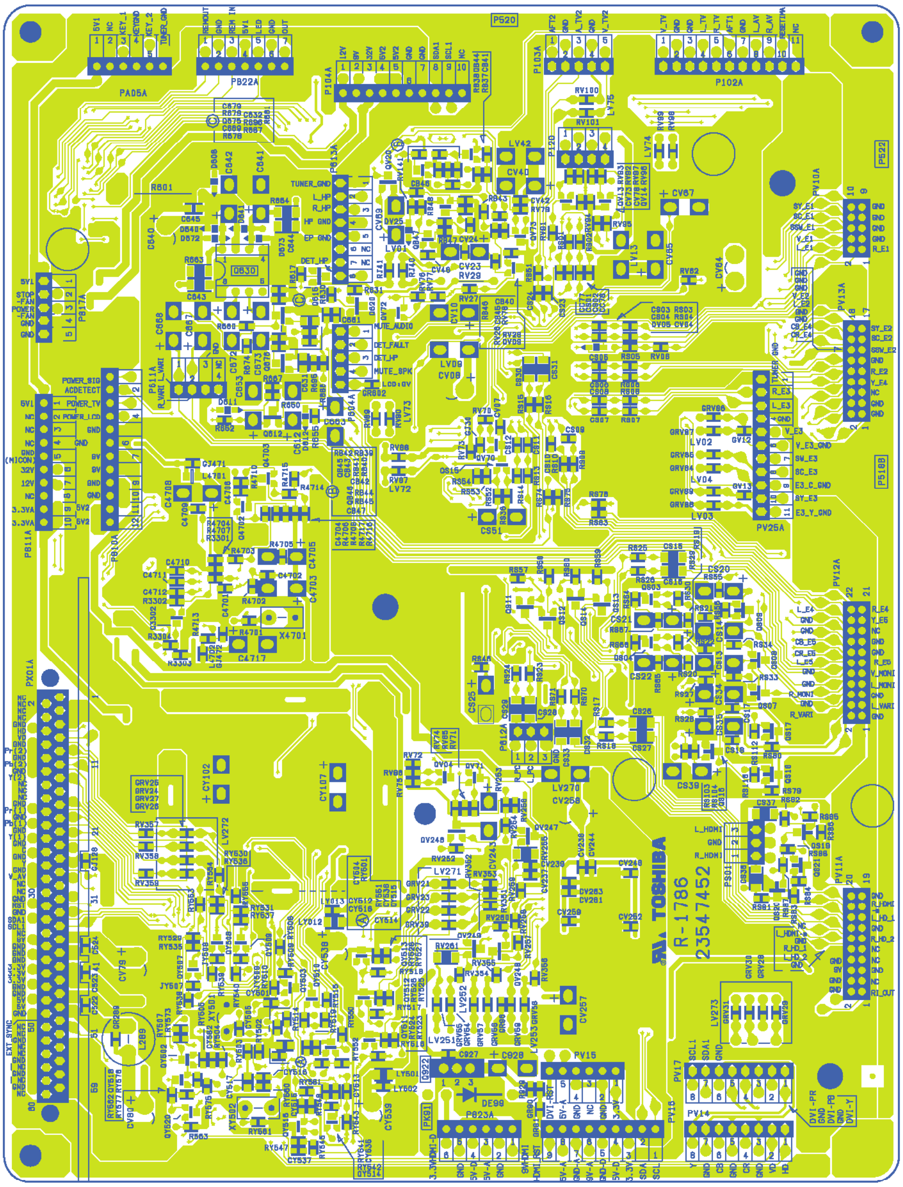
Location No.	Parts No.	Description
⚠ B001	23301535	LCD MODULE, LTA320W1-L04
GJ113	24000445	CHIP JUMPER, 1608TYPE
GJ128	24000445	CHIP JUMPER, 1608TYPE
GJ471	24000445	CHIP JUMPER, 1608TYPE
GJ472	24000445	CHIP JUMPER, 1608TYPE
GR01	24000445	CHIP JUMPER, 1608TYPE
GR02	24000445	CHIP JUMPER, 1608TYPE
GR03	24000445	CHIP JUMPER, 1608TYPE
GR04	24000445	CHIP JUMPER, 1608TYPE
GR24	24000445	CHIP JUMPER, 1608TYPE
GR25	24000445	CHIP JUMPER, 1608TYPE
GR26	24000445	CHIP JUMPER, 1608TYPE
GR91	24000445	CHIP JUMPER, 1608TYPE
GR96	24000445	CHIP JUMPER, 1608TYPE
GR105	24000445	CHIP JUMPER, 1608TYPE
GR602	24000445	CHIP JUMPER, 1608TYPE
GR605	24000445	CHIP JUMPER, 1608TYPE
GR621	24000445	CHIP JUMPER, 1608TYPE
GR622	24000445	CHIP JUMPER, 1608TYPE
GR623	24000445	CHIP JUMPER, 1608TYPE
GRS05	24000445	CHIP JUMPER, 1608TYPE
GRS06	24000445	CHIP JUMPER, 1608TYPE
GRV12	24000445	CHIP JUMPER, 1608TYPE
GRV13	24000445	CHIP JUMPER, 1608TYPE
GRV14	24000445	CHIP JUMPER, 1608TYPE
GRV15	24000445	CHIP JUMPER, 1608TYPE
GRV24	24000445	CHIP JUMPER, 1608TYPE

Location No.	Parts No.	Description
GRV25	24000445	CHIP JUMPER, 1608TYPE
GRV26	24000445	CHIP JUMPER, 1608TYPE
GRV27	24000445	CHIP JUMPER, 1608TYPE
GRV28	24000445	CHIP JUMPER, 1608TYPE
GRV29	24000445	CHIP JUMPER, 1608TYPE
GRV30	24000445	CHIP JUMPER, 1608TYPE
GRV31	24000445	CHIP JUMPER, 1608TYPE
GV12	23103828	INDUCTOR, BEAD, TEM2121M
GV13	23103828	INDUCTOR, BEAD, TEM2121M
H002	23148043	IF MODULE, US WOW MSP3441G VDS MVUS52
H003	23124087	ANTENNA SWITCH, RSU135X1, 2130 BUNPAI US
H003A	23740989	NUT, F-CONNECTOR 2H BS
KB01	23000852	IC, REMOTE PHOTO RECEIVER, PIC-37043TE2
M002	23725037	CABLE, WITH PLUG, 20P 300MM, YFB07-20A1-300
MZ01	23368859	CABLE, LVDS 31P LCD 320MM
N004	23969797	TAPE
P102A	23367071	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B11B-EH-F1A
P102B	23367071	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B11B-EH-F1A
P103A	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
P103B	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
P104A	23367070	PLUG , NP 2.5MM G JST-EHB10B-EH-F1A
P104B	23367070	PLUG , NP 2.5MM G JST-EHB10B-EH-F1A
P105	23368577	CONNECTOR, PLUG, 3P 2.5MM G JST-EH, B3B-EH-F1-TV4
P601	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
P604A	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
P604B	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
P610A	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
P610B	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
P611A	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
P611B	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
P612A	23368577	CONNECTOR, PLUG, 3P 2.5MM G JST-EH, B3B-EH-F1-TV4
P613A	23367068	CONNECTOR, PLUG 8P, 2.5MM G JST-EH B8B-EH-F1-TV4
P613B	23367068	CONNECTOR, PLUG 8P, 2.5MM G JST-EH B8B-EH-F1-TV4
P661	23365500	EARPHON JACK
⚠ P801	23372252	POWERCORD, UL 7A 2.2M, VM0298-VM3073
P809A	23367068	CONNECTOR, PLUG 8P, 2.5MM G JST-EH B8B-EH-F1-TV4
P810A	23367072	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B12B-EH-F1A
P811A	23367070	PLUG , NP 2.5MM G JST-EHB10B-EH-F1A
P817A	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
P823A	23368580	CONNECTOR, PLUG 6P, 2.5MM G JST-EH B6B-EH-F1-TV4
PB22A	23368581	CONNECTOR, PLUG 7P, 2.5MM G JST-EH B7B-EH-F1-TV4
PB22A	23368581	CONNECTOR, PLUG 7P, 2.5MM G JST-EH B7B-EH-F1-TV4
PP02	23974994	BAND, KESSOKU
PP03	23845859	HOLDER, WIRE, PVC-C0AT, L=70MM
PR80	23365432	EARPHONE JACK
⚠ PV01	23023132	JACK, PIN 2S6P SMK LAP5030-0111GC
⚠ PV02	23023087	JACK, PIN 7P SMKLAP5030-0203G
⚠ PV03	23023024	JACK, PIN 5P SMKLAP5030-0201G
⚠ PV05	23023133	JACK, PIN 5P SMK LAP50300206GC
PV17	23367068	CONNECTOR, PLUG 8P, 2.5MM G JST-EH B8B-EH-F1-TV4
PV25A	23367071	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B11B-EH-F1A
PV25B	23367071	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B11B-EH-F1A
⚠ PV60	23365819	JACK, 1S3P
PX01	23903176	SOCKET, 60P TKD, 136901160W4
PX01A	23903176	SOCKET, 60P TKD, 136901160W4
PY02	23148075	SCAN CONVERTER MODUL, G.HYPER MVPU43
SA01	23145430	SWITCH, PUSH, SKHHLMA010
SA02	23145430	SWITCH, PUSH, SKHHLMA010
SA03	23145430	SWITCH, PUSH, SKHHLMA010
SA04	23145430	SWITCH, PUSH, SKHHLMA010
SA05	23145430	SWITCH, PUSH, SKHHLMA010
SA06	23145430	SWITCH, PUSH, SKHHLMA010
SA07	23145430	SWITCH, PUSH, SKHHLMA010
✻ UF01	23125908	FAN, DC 12V 60MM, D06R-12SL
W661	23351219	SPEAKER, SPK1441AO, 50X90 16-OHM 5W

Location No.	Parts No.	Description
W662	23351223	SPEAKER, SPK1443AO, WF 50X90 16-OHM 5W
X4701	23153721	CERAMIC RESONATOR, 503KHZ
XY501	23153961	CRYSTAL, 3.58MHZ
XY502	23153721	CERAMIC RESONATOR, 503KHZ
⚠ ZA01	23103778	FERRITE CORE, TFE1008
⚠ ZA03	23103840	FERRITE CORE, TFE1013
PC BOARD ASSEMBLIES		
✻ U001A	75000535	PC BOARD ASSY, PD1362A1, TN/IMA
✻ U001B	75000536	PC BOARD ASSY, PD1362A2, SIGNAL
✻ U002A	75000537	PC BOARD ASSY, PD1363A1, BACK/AV
✻ U002B	75000538	PC BOARD ASSY, PD1363A2, A-OUT
✻ U002C	75000539	PC BOARD ASSY, PD1363A3, IR/LED
✻ U003A	75000540	PC BOARD ASSY, PD1364A1, FRONT/AV
✻ U003B	75000541	PC BOARD ASSY, PD1364A2, KET SW
✻ U003D	75000543	PC BOARD ASSY, PD1364A4, POWER SW
✻ U003E	75000544	PC BOARD ASSY, PD1364A5, CON G-HYPER
✻ U800	23122440	POWERUNIT, SWITCHING, MPF3602-1
✻ U801	23122441	POWERUNIT, DCDC, MPF3602-2
TUNER		
⚠ H001	23321460	TUNER, US181CH IIC FONO5V ELA52LX2
⚠ HY01	23321445	TUNER, TIF US IIC PH 181CH MONO EL973L
ACCESSORIES		
K902	23306504	REMOCON HAND UNIT IR, CTVUSA CT-90164
K903	23306465	REMOCON HAND UNIT, IR BLAST VTR CONT
⚠ Y101	23566134	OWNERS MANUAL, ENG/FRE/SPA
Y109	23945015	BAG, POLYETHYLENE COVER 250X400
Y170	23845800	WIREHOLDER, NYLON66 D6.8
CABINET PARTS		
⚠ A101	23450760	FRONTPANEL, 32HL83
A101B	23527316	GRILLE, SPEAKER, 32HL83
A101H	70391685	PB3X4 SZN
A102	70391356	SCREW
A103	23450762	PANEL, PCJACK, 32HL83
A104	70391356	SCREW
A108	23035412	SCREW
A109	23929028	PIECE, CONTROL BOX, KEY REAR
A110	23929067	PIECE, CONT BOX KEY FRONT ASSY
A111	23929044	PIECE, CONTROL BOX, KEY COVER
A112	23929031	PIECE, CONTROL BOX, AV REAR
A113	23929068	PIECE, CONT BOX AV FRONT ASSY
A114	23929046	PIECE, CONTROL BOX, AV COVER
A115	70391356	SCREW
A116	23035412	SCREW
⚠ A201	23532368	BACKCOVER, 32HL83
A207	23950113	LABEL, SERIAL NUMBER, TTX3
A304	23035412	SCREW
A336	72471064	SCREW, BIDT2 3*10BZ
A338	72471012	SCREWWITH WASHER
A342	70391439	SCREW
A356	72471012	SCREWWITH WASHER
A357	23717143	SCREW, PB6X16 SBN S70391347
A360	72471025	PB3X12BNI
A367	23035004	SCREW
A368	23845800	WIREHOLDER, NYLON66 D6.8
A402	23067481	CARTON BOX, 32HL83
A403	23945143	BAG, PROTECTIVE
A404	23518043	PACKING, JOINT
E001	23072526	SCALER BLOCK, 94TBGDSB-SUF010L-
E003	23148090	MODULE, 03DVI PD0647C

SIGNAL BOARD PD1362A-2

BOTTOM (FOIL) SIDE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PV12A
PV11A
P817A
PB10A
PB11A
P811A
PX01A
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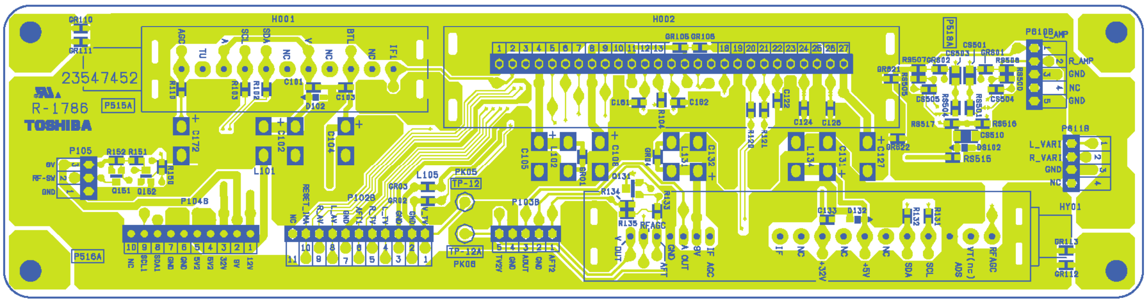
PV16
PV17
PV14

TN/IMA BOARD PD1362A-1

BOTTOM (FOIL) SIDE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TP-12A
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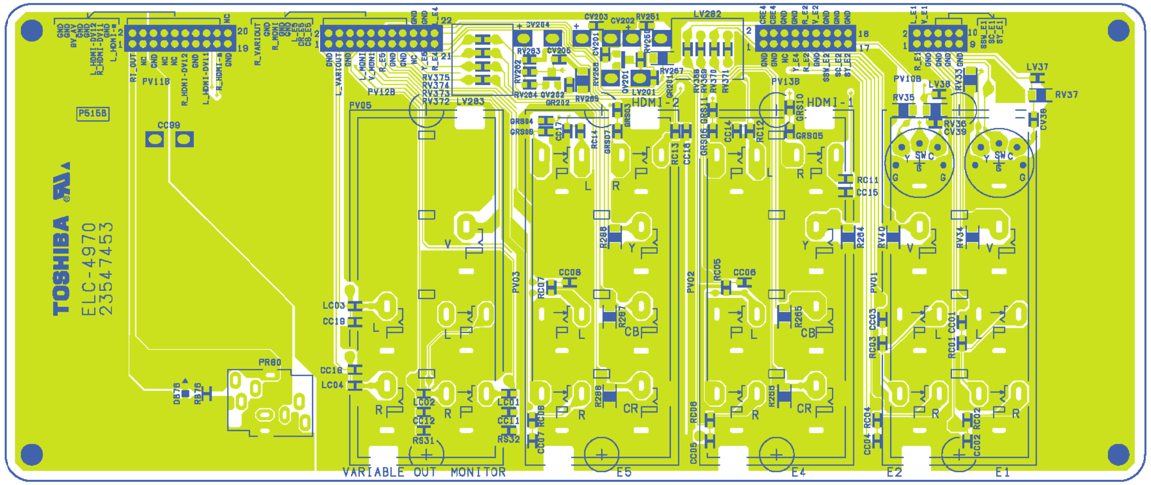
P611B
HY01

BACK / AV BOARD PD1363A-1

BOTTOM (FOIL) SIDE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PV01
PV13B
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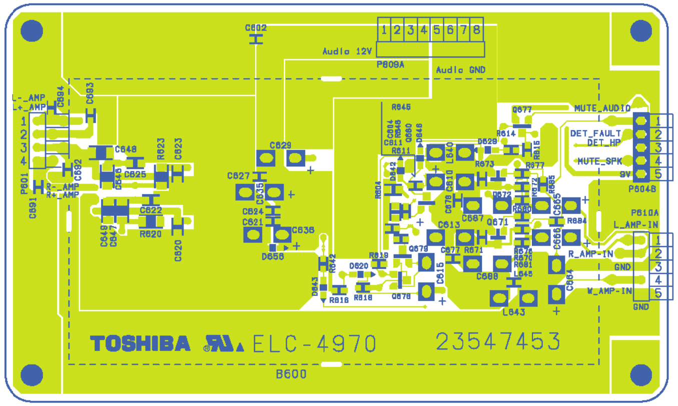
HDMI-1
VARIABLE OUT MONITOR
E5
E4
E2
E1
LV37
RV37
CV38
PR80
CC09
LC03
CC19
CC18
LC04
CB
CR

A-OUT BOARD PD1363A-2

BOTTOM (FOIL) SIDE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GND
W_AMP-IN
L-_AMP
L+_AMP
R-_AMP
R+_AMP
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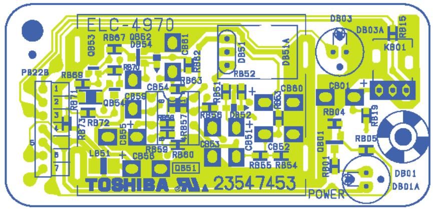
B600

IR/LED BOARD PD1363A-3

BOTTOM (FOIL) SIDE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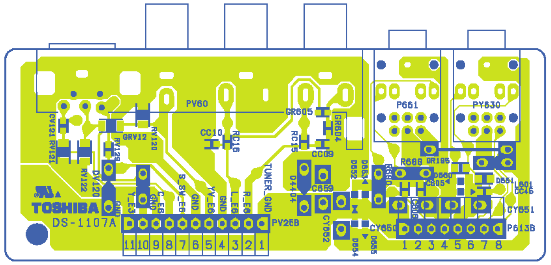
D801A
D803
D803A
K801
R815

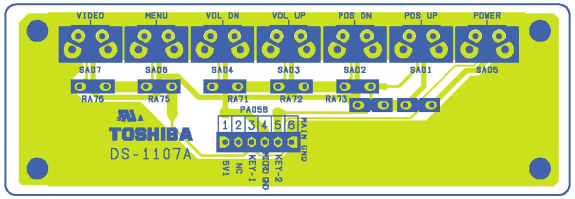
FRONT/AV BOARD PD1364A-1

BOTTOM (FOIL) SIDE


PV60
P661
PY630
TOSHIBA
DS-1107A
PV26B
P613B
TUNER_GND
11 10 9 8 7 6 5 4 3 2 1
1 2 3 4 5 6 7 8

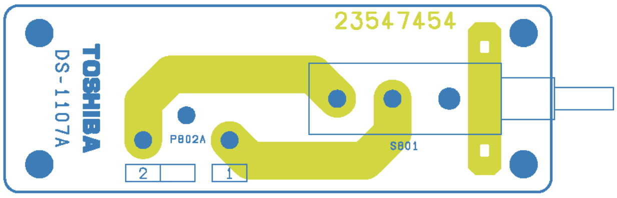
KEY BOARD PD1364A-2

BOTTOM (FOIL) SIDE


VIDEO
MENU
VOL_DN
VOL_UP
POS_DN
POS_UP
POWER
SA07
SA06
SA04
SA03
SA02
SA01
SA05
RA76
RA75
RA71
RA72
RA73
PA05B
1 2 3 4 5 6
TOSHIBA
DS-1107A
5V1
NC
KEY-1
MICRO GND
KEY-2
MAIN GND

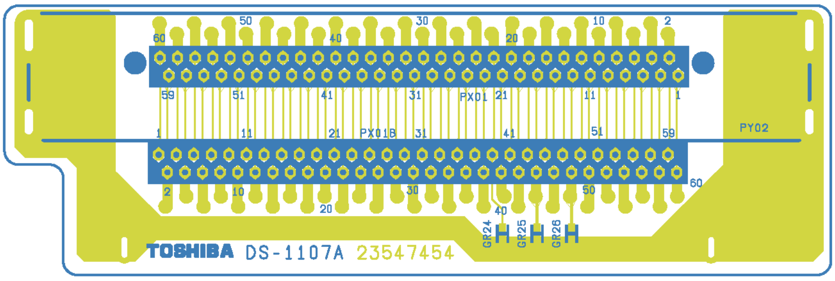
POWER SW BOARD PD1364A-4

BOTTOM (FOIL) SIDE


23547454
TOSHIBA
DS-1107A
P802A
S801
2
1

CON G-HYPER BOARD PD1364A-5

BOTTOM (FOIL) SIDE


50
30
10
2
60
40
20
59
51
41
31
PX01
21
11
1
1
11
21
PX01B
31
41
51
59
PY02
2
10
20
30
40
50
60
GR24
GR25
GR26
TOSHIBA
DS-1107A
23547454

SPECIFICATIONS

Television System
- NTSC standard

Channel Coverage
- VHF: 2 through 13
- UHF: 14 through 69
- Cable TV: Mid band (A-8 through A-1, A through I)
  - Super band (J through W)
  - Hyper band (AA through ZZ, AAA, BBB)
  - Ultra band (65 through 94, 100 through 125)

Power Source
- 110-240 V AC, 50/60 Hz

Power Consumption
- 173 W (average)

Audio Power
- 10 W + 10 W

Speaker Type
- Four 2 x 3-1/2 inches (50 x 90 mm)

Video/Audio Terminals
- S-VIDEO INPUT
  - Y : 1 V(p-p), 75 ohm, negative sync.
  - C : 0.286 V(p-p) (burst signal), 75 ohm
- VIDEO/AUDIO INPUT
  - VIDEO: 1 V(p-p), 75 ohm, negative sync.
  - AUDIO: 150 mV(rms) (30% modulation equivalent, 47k ohm)
- ColorStream® (component video) INPUT
  - Y : 1V(p-p), 75 ohm
  - PR: 0.7 V(p-p), 75 ohm
  - PB: 0.7 V(p-p), 75 ohm
  - AUDIO: 150 mV(rms), 47k ohm
- VIDEO/AUDIO OUTPUT
  - VIDEO: 1 V(p-p), 75 ohm, negative sync.
  - AUDIO: 150 mV(rms) (30% modulation equivalent, 4.7k ohm)
- VARIABLE AUDIO OUTPUT
  - 0–300 mV(rms) (30% modulation equivalent, 4.7k ohm)
- DVI/HDCP INPUT
  - HDCP compliant
  - E-EDID* 1.3 compliant
  - DVI-D uncompressed, high-speed, digital single-link connection
  - Suggested input scan rates: 1080i, 720p, 480p, 480i
- Headphones jack
  - 3.5 mm stereo

TheaterLink
- OUTPUT: 3 V(p-p), 10k ohm

Dimensions
- Width : 41-57/64 inches (1,064 mm)
- Height : 23-55/64 inches (606 mm)
- Depth : 5-15/16 inches (151 mm)

Mass (weight)
- 72.8 lbs (33.0 kg)

Operating condition
- Temperature: 32°F – 95°F (0°C – 35°C)
- Humidity: 20 – 80% (No moisture condensation)

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*E-EDID = Enhanced-Extended Display Identification

∗ Please refer to owner's manual in detail.
Design and specifications are subject to change without notice.

– END –

TOSHIBA CORPORATION
1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN

SCHEMATIC DIAGRAM

MODEL : 32HL83

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

CAUTION: The international hazard symbols "⚠ " in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

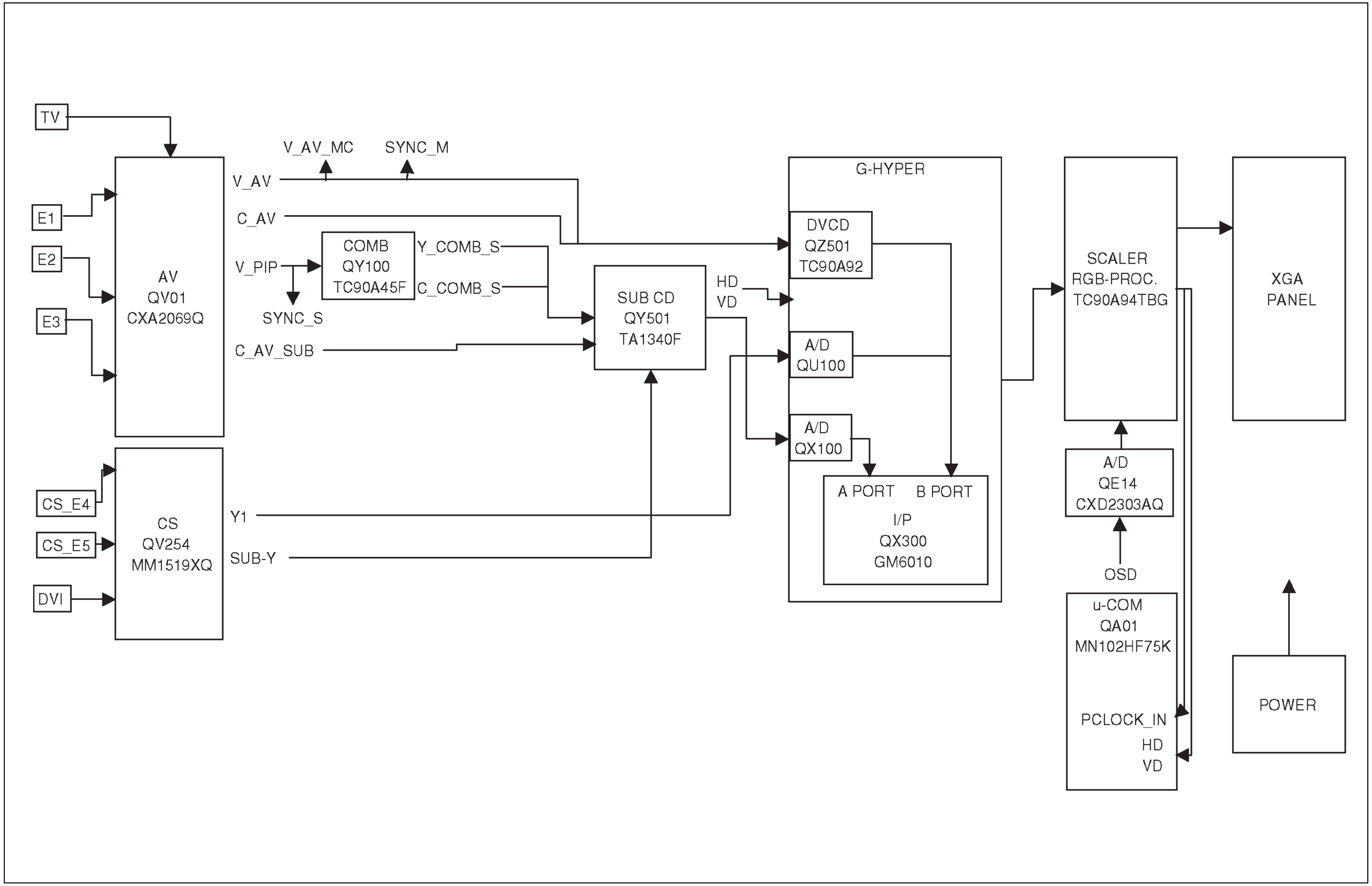
NOTE:

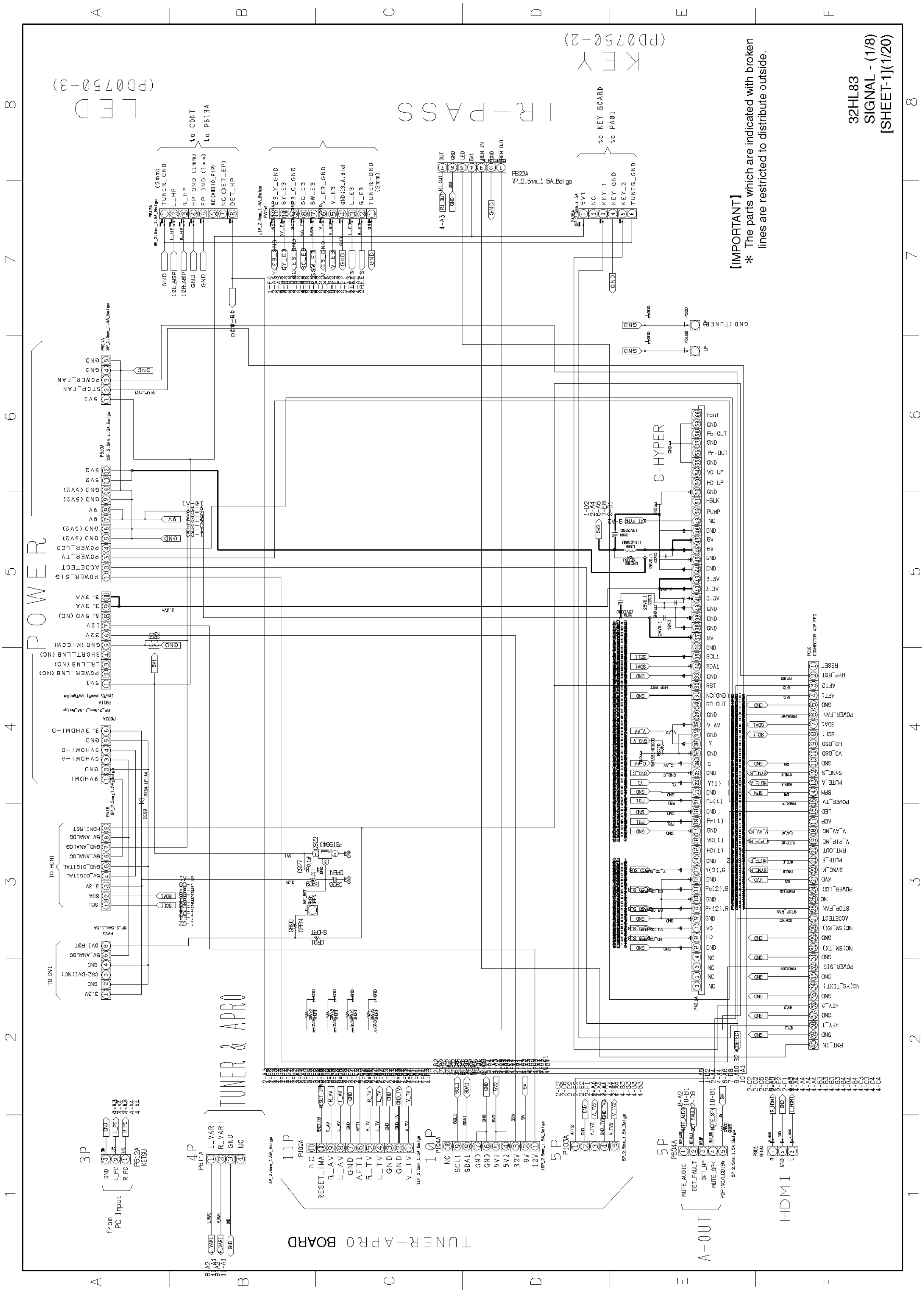
1. RESISTOR Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
   1/2R = Metal or Metal oxide of 1/2 watt 1/2S = Carbon compsistion of 1/2 watt
   1RF = Fuse resistor of 1 watt 10W = Cement of 10 watt
   K = ±10% G = ±2% F = ±1%
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF, and the values more than 1 in pF.
   All capacitors are ceramic 50V, unless otherwise noted as the following marks.
   —+||— Electolytic capacitor —M||— Mylar capacitor
3. The parts indicated with " ⚠ " have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all controls at normal, line voltage 220 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary □20% except H.V.

■ SCHEMATIC DIAGRAM STRUCTURE:

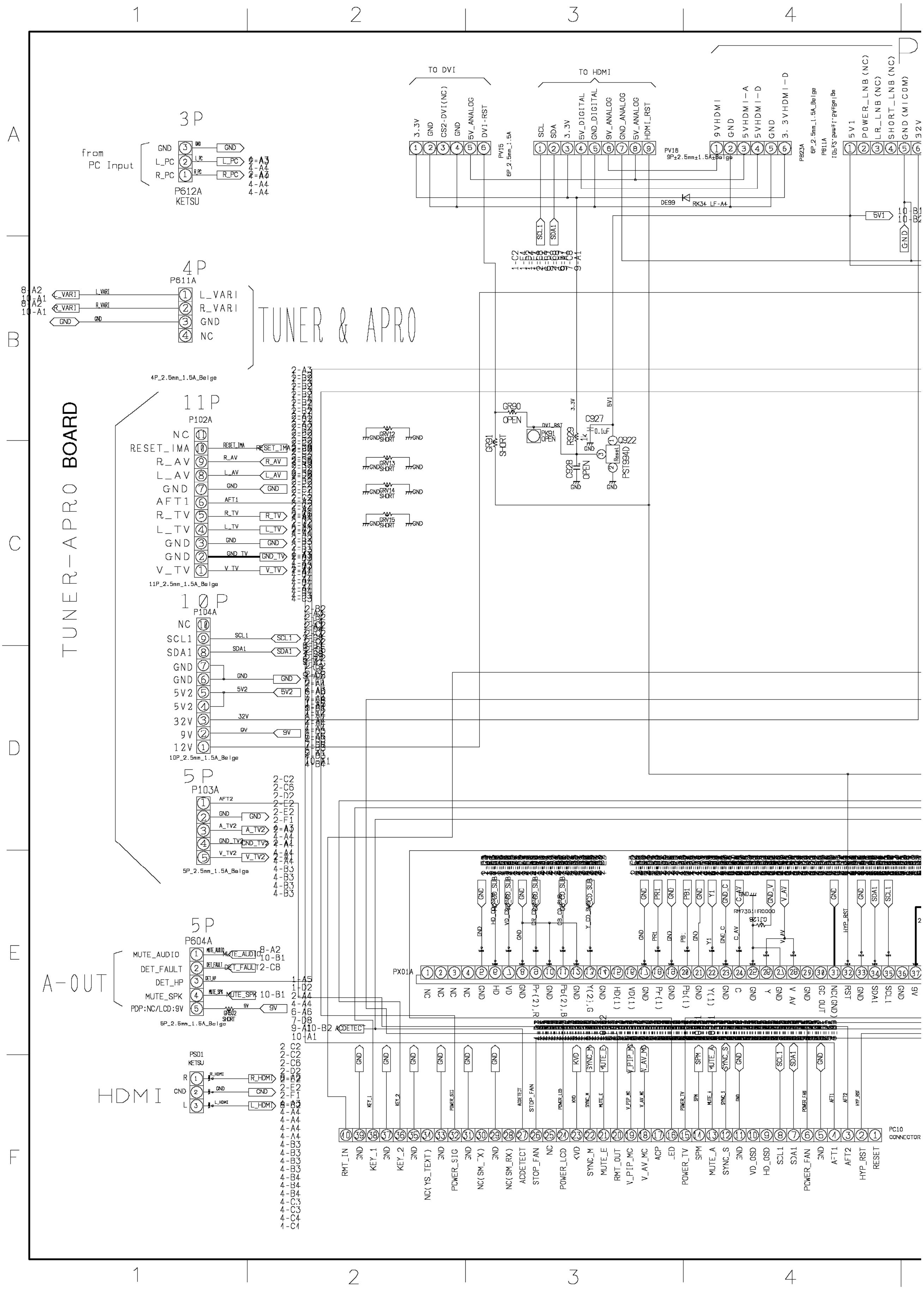
- SIGNAL
  - (1/8) [SHEET - 1] 1/20
  - AV-1 [SHEET - 2] 2/20
  - vs.AV [SHEET - 4] 3/20
  - AV-2 [SHEET - 6] 4/20
  - AV-3 [SHEET - 7] 5/20
  - VARI-OUTPUT / HDMI-Mute [SHEET - 8] 6/20
  - SYNC OUT [SHEET - 9] 7/20
  - HP-AMP&MUTE [SHEET - 10] 8/20
- BACK AV
  - BACK-AV1 [SHEET - 1] 9/20
  - BACK-AV3 [SHEET - 2] 10/20
- 2TN-IMA
  - 2TN-IMA [SHEET - 1] 11/20
  - AUDIO GAIN COMPENSATION [SHEET - 2] 12/20
- FRONT AV 13/20
- KEY 14/20
- POWER SW 15/20
- G-HYPER 16/20
- A-OUT
  - (1/2) [SHEET - 1/2] 17/20
  - (2/2) [SHEET - 2/2] 18/20
- IR-PASSTHROURGH 19/20
- WIRING CONNECTION DIAGRAM 20/20

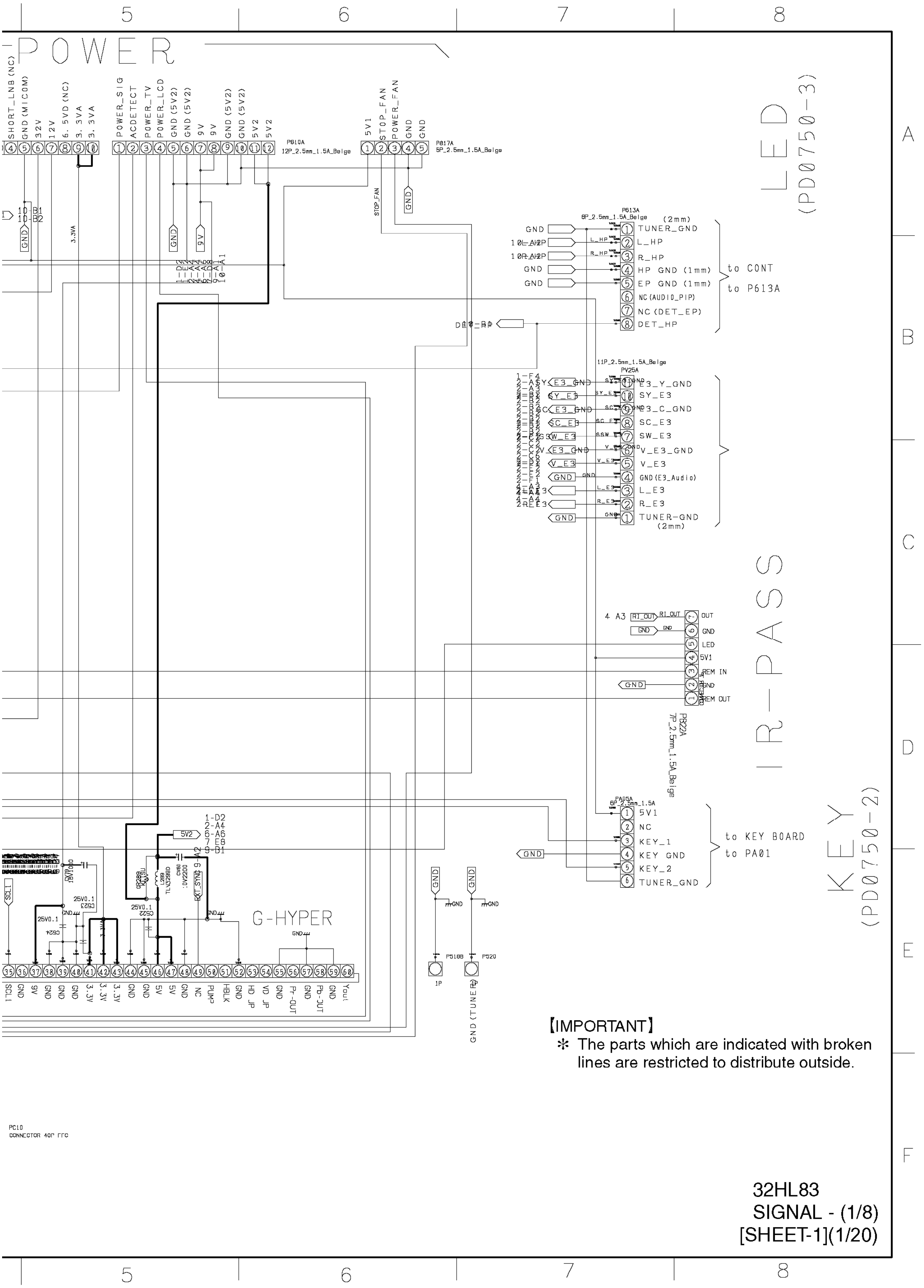
CIRCUIT BLOCK DIAGRAM


TV
E1
E2
E3
AV
QV01
CXA2069Q
CS_E4
CS_E5
DVI
CS
QV254
MM1519XQ
V_AV_MC
SYNC_M
V_AV
C_AV
V_PIP
COMB
QY100
TC90A45F
Y_COMB_S
C_COMB_S
SYNC_S
C_AV_SUB
SUB CD
QY501
TA1340F
Y1
SUB-Y
HD
VD
G-HYPER
DVCD
QZ501
TC90A92
A/D
QU100
A/D
QX100
A PORT
B PORT
I/P
QX300
GM6010
SCALER
RGB-PROC.
TC90A94TBG
A/D
QE14
CXD2303AQ
OSD
u-COM
QA01
MN102HF75K
PCLOCK_IN
HD
VD
XGA
PANEL
POWER


32HL83
SIGNAL - (1/8)
[SHEET-1](1/20)
POWER
TUNER & APRO
TUNER-APRO BOARD
LED (PD0750-3)
IR-PASS
KEY (PD0750-2)
G-HYPER
A-OUT
HDMI
from PC Input
TO DVI
TO HDMI
to CONT to P613A
to KEY BOARD to PA01
11P
10P
5P
4P
3P

【IMPORTANT】
＊ The parts which are indicated with broken lines are restricted to distribute outside.


1
2
3
4
A
B
C
D
E
F
TUNER-APRO BOARD
TUNER & APRO
TO DVI
TO HDMI
3.3V
GND
CS2-DVI(NC)
GND
5V_ANALOG
DVI-RST
PV15
6P_2.5mm_1.5A
SCL
SDA
3.3V
5V_DIGITAL
GND_DIGITAL
9V_ANALOG
GND_ANALOG
5V_ANALOG
HDMI_RST
PV16
9P_2.5mm_1.5A_Beige
9VHDMI
GND
5VHDMI-A
5VHDMI-D
GND
3.3VHDMI-D
PB23A
6P_2.5mm_1.5A_Beige
P811A
5V1
POWER_LNB(NC)
LR_LNB(NC)
SHORT_LNB(NC)
GND(MICOM)
32V
DE99
RK34 LF-A4
5V1
GND
SCL1
SDA1
3P
from
PC Input
GND
L_PC
R_PC
P612A
KETSU
4P
P611A
L_VARI
R_VARI
GND
NC
4P_2.5mm_1.5A_Beige
11P
P102A
NC
RESET_IMA
R_AV
L_AV
GND
AFT1
R_TV
L_TV
GND
GND
V_TV
11P_2.5mm_1.5A_Beige
10P
P104A
NC
SCL1
SDA1
GND
GND
5V2
5V2
32V
9V
12V
10P_2.5mm_1.5A_Beige
5P
P103A
AFT2
GND
A_TV2
GND_TV2
V_TV2
5P_2.5mm_1.5A_Beige
5P
P604A
A-OUT
MUTE_AUDIO
DET_FAULT
DET_HP
MUTE_SPK
PDP:NC/LCD:9V
5P_2.5mm_1.5A_Beige
9V
GR602
SHORT
ACDETECT
PSD1
KETSU
HDMI
R_HDMI
GND
L_HDMI
GR90
OPEN
GR91
SHORT
PK91
OPEN
DVI_RST
R929
C927
0.1uF
C928
OPEN
Q922
PST994D
GRV12
GRV13
GRV14
GRV15
SHORT
PX01A
NC
NC
NC
NC
GND
HD
VD
GND
Pr(2),R
GND
Pb(2),B
GND
Y(2),G
HD(1)
VD(1)
GND
Pr(1)
GND
Pb(1)
Y(1)
GND
C
GND
Y
V AV
GND
GC OUT
NC(GND)
RST
GND
SDA1
SCL1
GND
9V
RM7301
PC10
CONNECTOR
RMT_IN
GND
KEY_1
GND
KEY_2
GND
NC(YS_TEXT)
GND
POWER_SIG
GND
NC(SM_TX)
GND
NC(SM_RX)
ACDETECT
STOP_FAN
NC
POWER_LCD
KVD
SYNC_M
MUTE_E
RMT_OUT
V_PIP_MC
V_AV_MC
ACP
LED
POWER_TV
SPM
MUTE_A
SYNC_S
GND
VD_OSD
HD_OSD
SCL1
SDA1
POWER_FAN
GND
AFT1
AFT2
HYP_RST
RESET


5
6
7
8
A
B
C
D
E
F
POWER
SHORT_LNB(NC)
GND(MICOM)
32V
12V
6.5VD(NC)
3.3VA
3.3VA
POWER_SIG
ACDETECT
POWER_TV
POWER_LCD
GND(5V2)
GND(5V2)
9V
9V
GND(5V2)
GND(5V2)
5V2
5V2
P810A
12P_2.5mm_1.5A_Beige
5V1
STOP_FAN
POWER_FAN
GND
GND
P817A
5P_2.5mm_1.5A_Beige
LED
(PD0750-3)
P613A
8P_2.5mm_1.5A_Beige
(2mm)
TUNER_GND
L_HP
R_HP
HP GND (1mm)
EP GND (1mm)
NC(AUDIO_PIP)
NC(DET_EP)
DET_HP
to CONT
to P613A
11P_2.5mm_1.5A_Beige
PV25A
E3_Y_GND
SY_E3
E3_C_GND
SC_E3
SW_E3
V_E3_GND
V_E3
GND(E3_Audio)
L_E3
R_E3
TUNER-GND
(2mm)
IR-PASS
4 A3
RI_OUT
OUT
GND
LED
5V1
REM IN
GND
REM OUT
P822A
7P_2.5mm_1.5A_Beige
KEY
(PD0750-2)
PA05A
6P_2.5mm_1.5A
5V1
NC
KEY_1
KEY GND
KEY_2
TUNER_GND
to KEY BOARD
to PA01
1-D2
2-A4
6-A6
7 E8
9-D1
5V2
G-HYPER
SCL1
GND
9V
GND
GND
GND
3.3V
3.3V
3.3V
GND
GND
5V
5V
GND
NC
PUMP
HBLK
GND
HD JP
VD JP
GND
Pr-OUT
GND
Pb-OUT
GND
Yout
P5108
P520
1P
GND(TUNER)
PC10
CONNECTOR 40P FFC

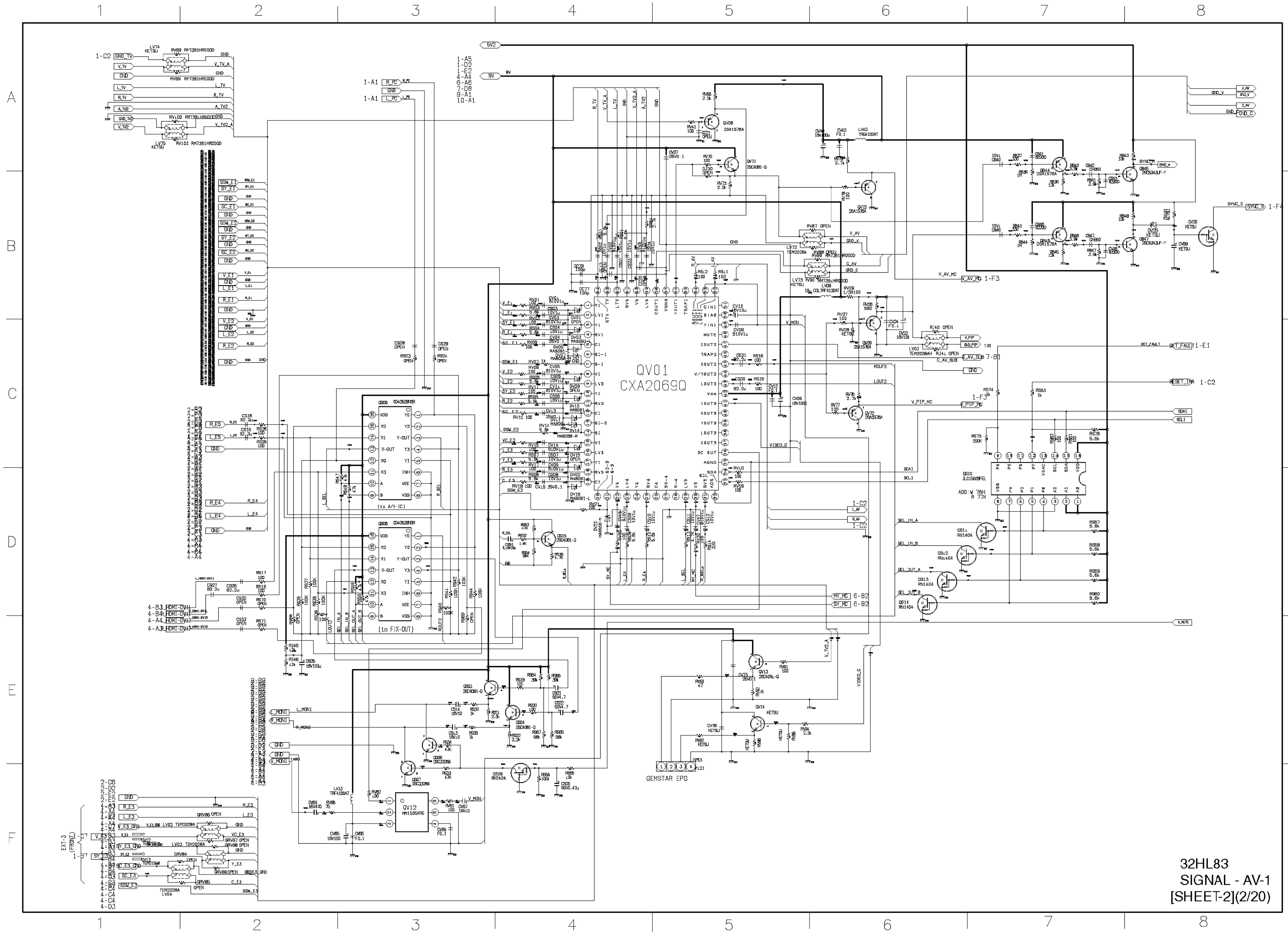
【IMPORTANT】

＊ The parts which are indicated with broken lines are restricted to distribute outside.

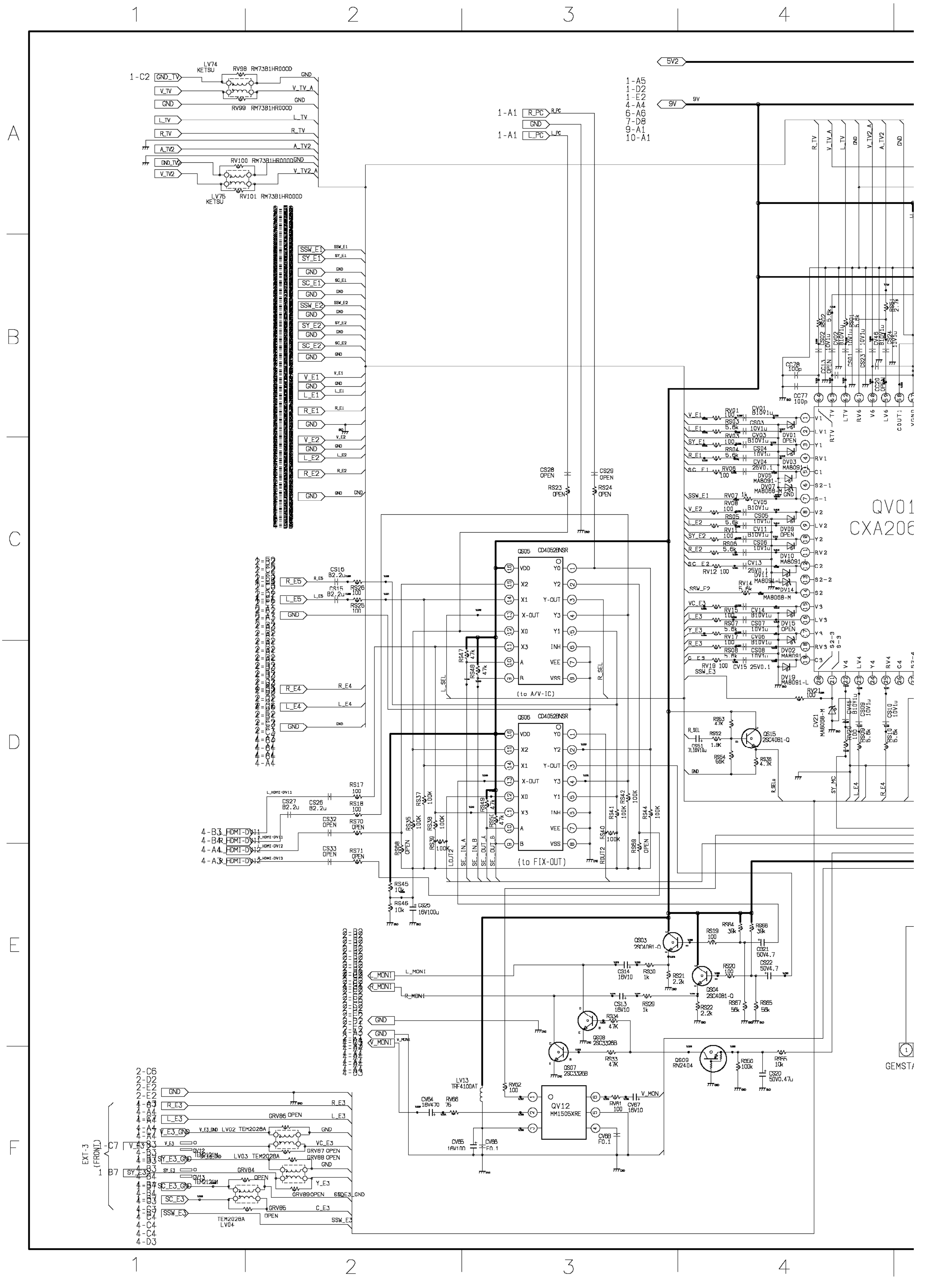
32HL83

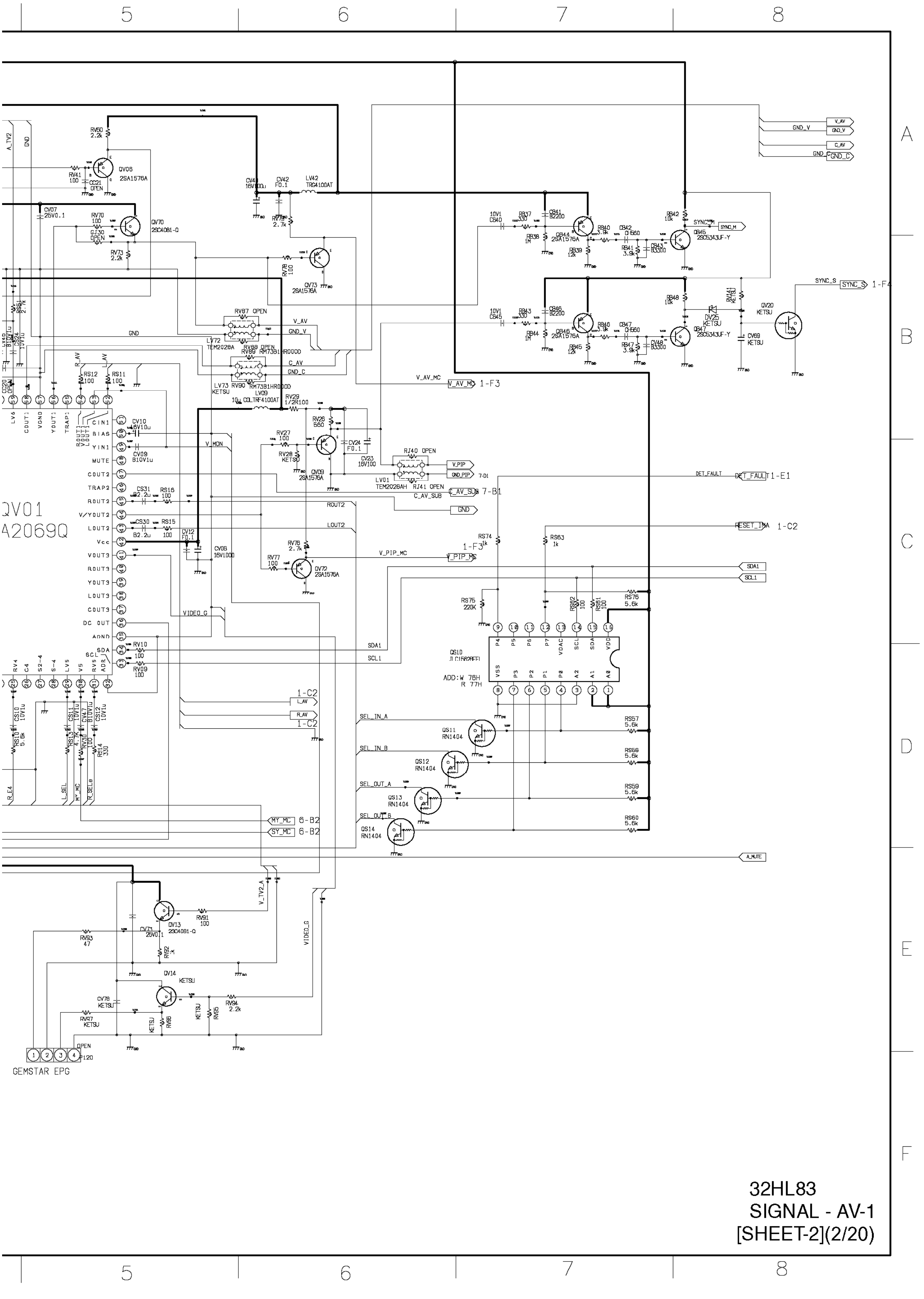
SIGNAL - (1/8)

[SHEET-1](1/20)

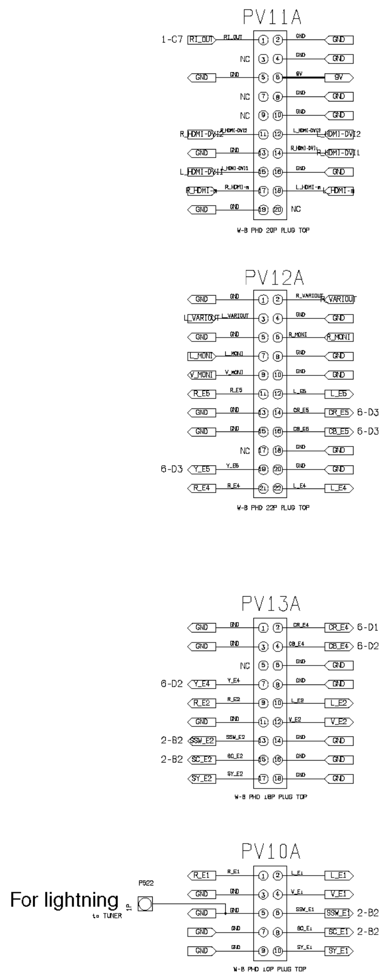

QV01
CXA2069Q
QS05 CD4052BNSR
(to A/V-IC)
QS06 CD4052BNSR
(to FIX-OUT)
QS10 JLC1562BFEL
ADD:W 76H R 77H
QV12 MM1505XRE
GEMSTAR EPG
EXT-3 (FRONT)
QV06 2SA1576A
QV70 2SC4081-Q
QV73 2SA1576A
QV09 2SA1576A
QV72 2SA1576A
QV13 2SC4081-Q
QV14
QB44 2SA1576A
QB45 2SC5343LF-Y
QB46 2SA1576A
QB47 2SC5343LF-Y
QV20
QS11 RN1404
QS12 RN1404
QS13 RN1404
QS14 RN1404
QS15 2SC4081-Q
QS03 2SC4081-Q
QS04 2SC4081-Q
QS07 2SC3326
QS08 2SC3326
QS09 RN2404
9V
5V2
SYNC_S 1-F4
V_AV_MC 1-F3
DET_FAULT 1-E1
RESET_IMA 1-C2
V_PIP_MC
C_AV_SUB 7-B1
SDA1
SCL1
A_MUTE
MY_MC 6-B2
SY_MC 6-B2
1-C2
1-A1 R_PC
1-A1 L_PC
1-A5
1-D2
1-E2
4-A4
6-A6
7-D8
9-A1
10-A1
HDMI-DV1
VIDEO_G
V_MON
L_MONI
R_MONI
V_MONI
1
2
3
4
5
6
7
8
A
B
C
D
E
F

32HL83
SIGNAL - AV-1
[SHEET-2](2/20)

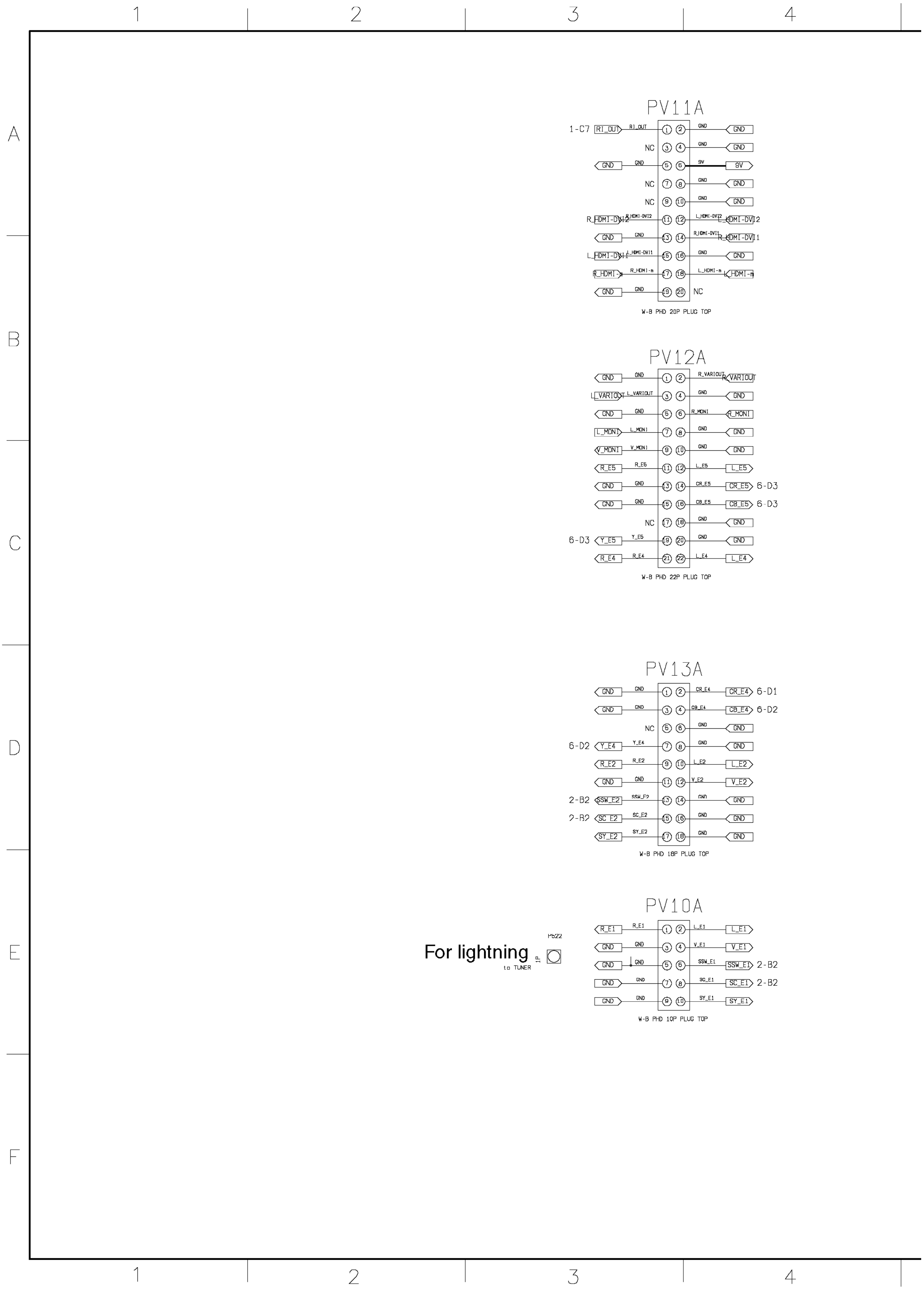

1
2
3
4
A
B
C
D
E
F
1-C2
GND_TV
V_TV
GND
L_TV
R_TV
A_TV2
GND_TV
V_TV2
LV74
KETSU
RV98 RM73B1HR000D
RV99 RM73B1HR000D
RV100 RM73B1HR000D
RV101 RM73B1HR000D
LV75
KETSU
V_TV_A
A_TV2
V_TV2_A
SSW_E1
SY_E1
SC_E1
SSW_E2
SY_E2
SC_E2
V_E1
L_E1
R_E1
V_E2
L_E2
R_E2
1-A1
R_PC
L_PC
CS28
OPEN
RS23
OPEN
CS29
OPEN
RS24
OPEN
1-A5
1-D2
1-E2
4-A4
6-A6
7-D8
9-A1
10-A1
5V2
9V
QV01
CXA206
QS05 CD4052BNSR
VDD
X2
X1
X-OUT
X0
X3
INH
VEE
VSS
Y0
Y2
Y-OUT
Y3
Y1
A
B
(to A/V-IC)
(to FIX-OUT)
L_SEL
R_SEL
QS06 CD4052BNSR
R_E5
L_E5
CS16
B2.2u
CS15
B2.2u
RS26
100
RS25
100
R_E4
L_E4
RS47
47K
RS48
47K
RS49
47k
RS50
47k
4-B3
4-B4
4-A4
4-A3
HDMI-DV
CS27
B2.2u
CS26
B2.2u
RS17
100
RS18
100
CS32
OPEN
RS70
OPEN
CS33
OPEN
RS71
OPEN
RS35
OPEN
RS37
100K
RS38
100K
RS39
100K
RS36
OPEN
RS45
10k
RS46
10k
CS25
16V100u
LOUT2
SE_IN_A
SE_IN_B
SE_OUT_A
SE_OUT_B
ROUT2
RS40
100K
RS41
100K
RS42
100K
RS43
100K
RS44
100K
RS69
OPEN
RV01
RV03
CV01
CV03
CS03
DV01
OPEN
DV03
MA8091-L
DV05
DV07
MA8068-M
RV07
CV05
CS05
DV09
RV12 100
CV13
25V0.1
DV11
DV14
MA8068-M
SSW_E2
VC_E3
L_E3
Y_E3
R_E3
C_E3
SSW_E3
RV19 100
CV15 25V0.1
DV19
MA8091-L
RV21
DV21
MA8068-M
CV45
CS09
CS10
CC78
100p
CC77
100p
V1
LV1
Y1
RV1
C1
S2-1
S-1
V2
LV2
Y2
RV2
C2
S2-2
S2
V3
LV3
Y3
RV3
C3
RTV
LTV
RV6
V6
LV6
COUT1
R_SEL
CS51
RS52
1.8K
RS53
47K
RS54
56K
RS36
4.7K
QS15
2SC4081-Q
R_SELa
SY_MC
L_E4
R_E4
QS03
2SC4081-Q
QS04
2SC4081-Q
RS19
100
RS20
100
RS64
39k
RS66
39k
CS21
50V4.7
CS22
50V4.7
CS314
16V10
RS330
1k
RS21
2.2k
RS22
2.2k
CS13
16V10
RS29
1k
RS67
56k
RS65
56k
RS334
4.7K
RS333
4.7K
QS08
2SC3326B
QS07
2SC3326B
QS09
RN2404
RS350
100k
RS55
10k
CS20
50V0.47u
GEMSTA
L_MONI
R_MONI
GND
V_MONI
V_MON
LV13
TRF4100AT
RV62
100
CV64
16V470
RV66
75
QV12
MM1505XRE
RV61
100
CV67
16V10
CV68
F0.1
CV85
16V100
CV66
F0.1
2-C6
2-D2
2-E2
2-E2
4-A3
4-A4
4-A4
4-C7
4-B3
4-B3
4-B3
4-B4
4-C3
4-C4
4-C4
4-C4
4-D3
EXT-3
(FRONT)
C7
B7
V_E3
SY_E3
R_E3
L_E3
V_E3_GND
SY_E3_GND
SC_E3_GND
SC_E3
SSW_E3
GRV86 OPEN
LV02 TEM2028A
LV03 TEM2028A
LV04 TEM2028A
GRV87 OPEN
GRV88 OPEN
GRV84
GRV89 OPEN
GRV85
OPEN
QV12M
QV13
VC_E3
Y_E3
C_E3
SSW_E3


5
6
7
8
A
B
C
D
E
F
QV01
A2069Q
RV60 2.2k
QV08 2SA1576A
RV41 100
CC21 OPEN
CV07 25V0.1
RV70 100
QV70 2SC4081-Q
GJ30 OPEN
RV73 2.2k
CV41 16V100u
CV42 F0.1
LV42 TRG4100AT
RV79 2.7k
RV78 100
QV73 2SA1576A
RV87 OPEN
V_AV
GND_V
GND
LV72 TEM2028A
RV88 OPEN
RV89 RM73B1HR000D
C_AV
GND_C
LV73 KETSU
RV90 RM73B1HR000D
LV09 10u COLTRF4100AT
RV29 1/2R100
V_AV_MC
V_AV_MC 1-F3
RS12 100
RS11 100
R_AV
L_AV
CIN1
BIAS
YIN1
MUTE
COUT2
TRAP2
ROUT2
V/YOUT2
LOUT2
Vcc
VOUT3
ROUT3
YOUT3
LOUT3
COUT3
DC OUT
AGND
SDA
SCL
ADR
CV10 16V10u
CV09 B10V1u
CS31 B2.2u
RS16 100
CS30 B2.2u
RS15 100
CV12 F0.1
CV06 16V100U
V_MON
RV27 100
RV28 KETSU
RV26 560
QV09 2SA1576A
CV24 F0.1
CV23 16V100
RJ40 OPEN
LV01 TEM2028AH
RJ41 OPEN
V_PIP
GND_PIP
C_AV_SUB
C_AV_SUB 7-B1
GND
ROUT2
LOUT2
RV76 2.7k
RV77 100
QV72 2SA1576A
V_PIP_MC
V_PIP_MC
1-F3
VIDEO_G
RV10 100
RV09 100
SDA1
SCL1
1-C2
L_AV
R_AV
1-C2
CS10 10V1u
CS11 10V1u
CS12 10V1u
RS10 5.6k
RS14 330
L_SEL
MY_MC
R_SEL
MY_MC 6-B2
SY_MC 6-B2
RV93 47
QV13 2SC4081-Q
RV91 100
CV71 25V0.1
RV92 1k
V_TV2_A
VIDEO_G
QV14 KETSU
CV78 KETSU
RV97 KETSU
RV96 KETSU
RV95 KETSU
RV94 2.2k
OPEN
P120
GEMSTAR EPG
10V1 CB40
RB37 330
CB41 B2200
RB38 1M
CB44 2SA1576A
RB40 3.9k
CB42 CH560
RB41 3.9k
CB43 B3300
RB39 12k
RB42 10k
SYNC_M
CB45 2SC5343UF-Y
10V1 CB45
RB43 330
CB46 B2200
RB44 1M
CB46 2SA1576A
RB46 3.9k
CB47 CH560
RB47 3.9k
CB48 B3300
RB45 12k
RB48 10k
CB47 2SC5343UF-Y
DV25 KETSU
RV41 KETSU
QV20 KETSU
CV69 KETSU
SYNC_S
SYNC_S 1-F4
GND_V
V_AV
GND_V
C_AV
GND_C
GND_C
DET_FAULT
DET_FAULT 1-E1
RESET_IMA 1-C2
RS74 1k
RS63 1k
SDA1
SCL1
RS75 220K
RS62 100
RS61 100
RS76 5.6k
P4 P5 P6 P7 VDAC SCL SDA VDD
VSS P3 P2 P1 P0 A2 A1 A0
QS10
ADD:W 76H R 77H
SEL_IN_A
QS11 RN1404
RS57 5.6k
SEL_IN_B
QS12 RN1404
RS58 5.6k
SEL_OUT_A
QS13 RN1404
RS59 5.6k
SEL_OUT_B
QS14 RN1404
RS60 5.6k
A_MUTE

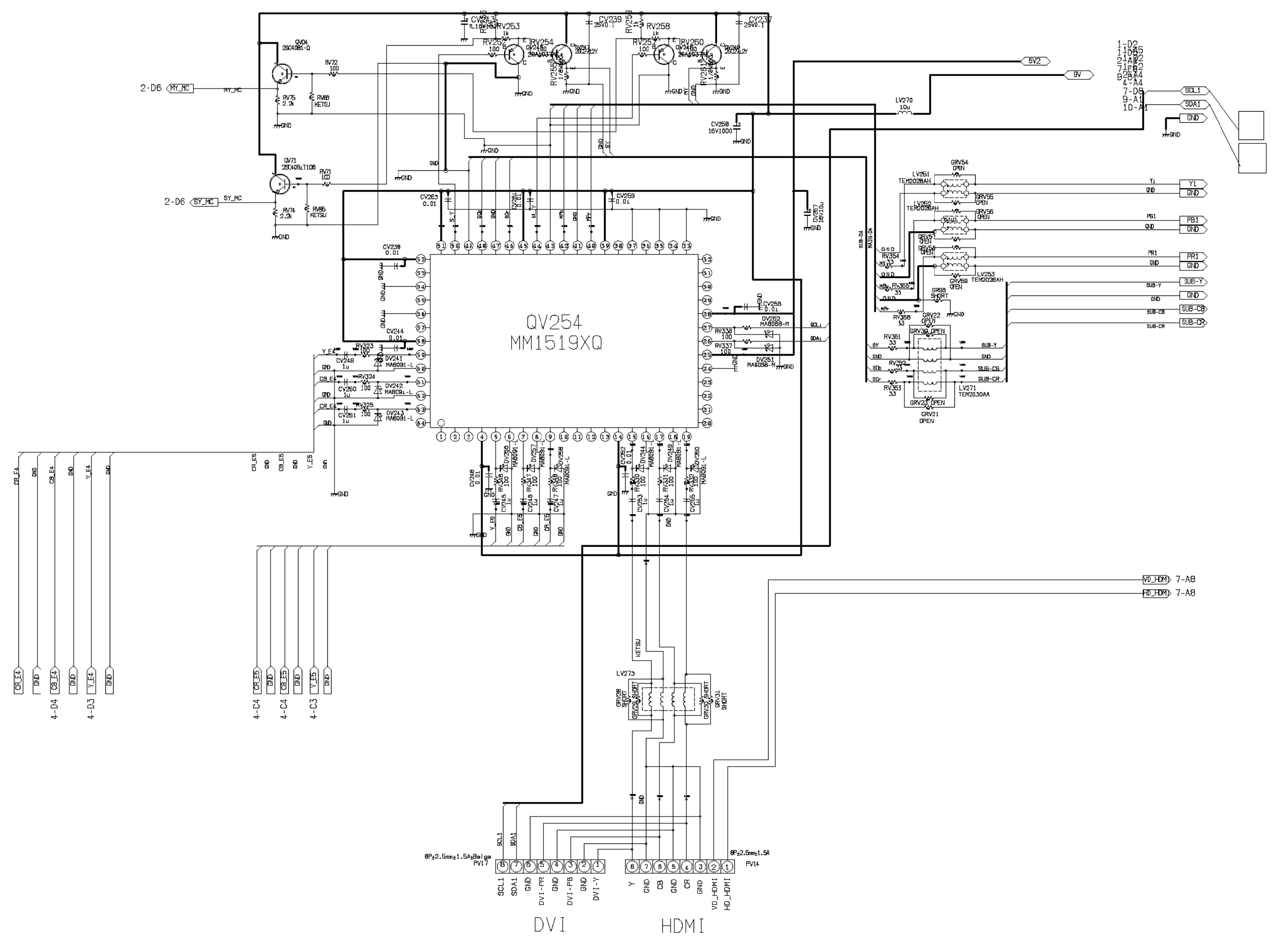
32HL83
SIGNAL - AV-1
[SHEET-2](2/20)


PV11A
1-C7 RI_OUT
NC
GND
9V
R_HDMI-DVI2
L_HDMI-DVI2
R_HDMI-DVI1
L_HDMI-DVI1
R_HDMI-m
L_HDMI-m
W-B PHD 20P PLUG TOP
PV12A
R_VARIOUT
L_VARIOUT
R_MONI
L_MONI
V_MONI
R_E5
L_E5
CR_E5 6-D3
CB_E5 6-D3
6-D3 Y_E5
R_E4
L_E4
W-B PHD 22P PLUG TOP
PV13A
CR_E4 6-D1
CB_E4 6-D2
6-D2 Y_E4
R_E2
L_E2
V_E2
2-B2 SSW_E2
2-B2 SC_E2
SY_E2
W-B PHD 18P PLUG TOP
PV10A
R_E1
L_E1
V_E1
SSW_E1 2-B2
SC_E1 2-B2
SY_E1
W-B PHD 10P PLUG TOP
For lightning
to TUNER
1P
P522

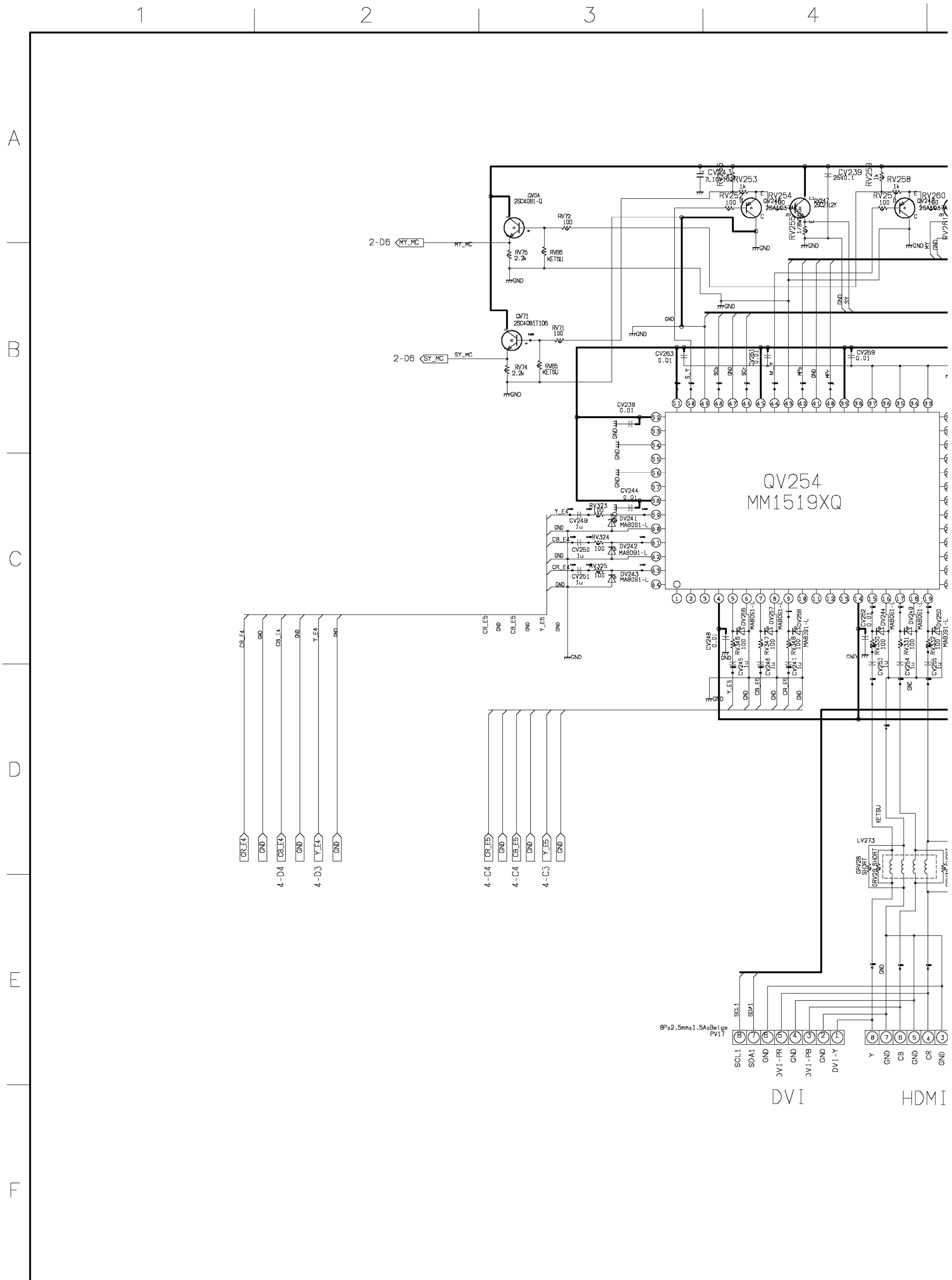
32HL83
SIGNAL - vs.AV
[SHEET-4](3/20)

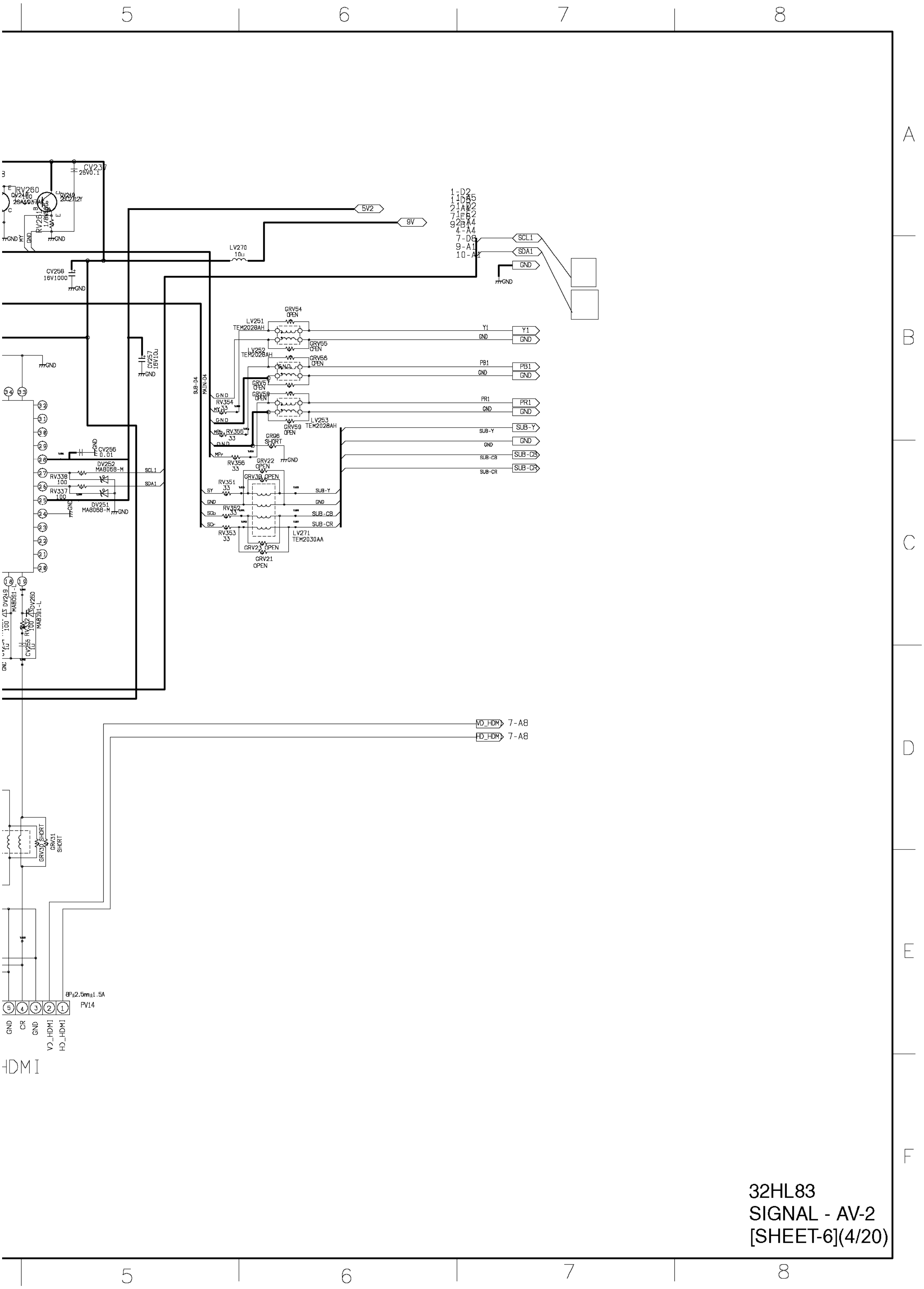

1
2
3
4
A
B
C
D
E
F
PV11A
1-C7
RI_OUT
GND
NC
9V
R_HDMI-DVI2
L_HDMI-DVI2
R_HDMI-DVI1
L_HDMI-DVI1
R_HDMI-m
L_HDMI-m
W-B PHD 20P PLUG TOP
PV12A
R_VARIOUT
L_VARIOUT
R_MONI
L_MONI
V_MONI
R_E5
L_E5
CR_E5
CB_E5
6-D3
Y_E5
R_E4
L_E4
W-B PHD 22P PLUG TOP
PV13A
CR_E4
6-D1
CB_E4
6-D2
Y_E4
R_E2
L_E2
V_E2
SSW_E2
2-B2
SC_E2
SY_E2
W-B PHD 18P PLUG TOP
PV10A
R_E1
L_E1
V_E1
SSW_E1
SC_E1
SY_E1
W-B PHD 10P PLUG TOP
For lightning
to TUNER
1P
P522

32HL83
SIGNAL - vs.AV
[SHEET-4](3/20)

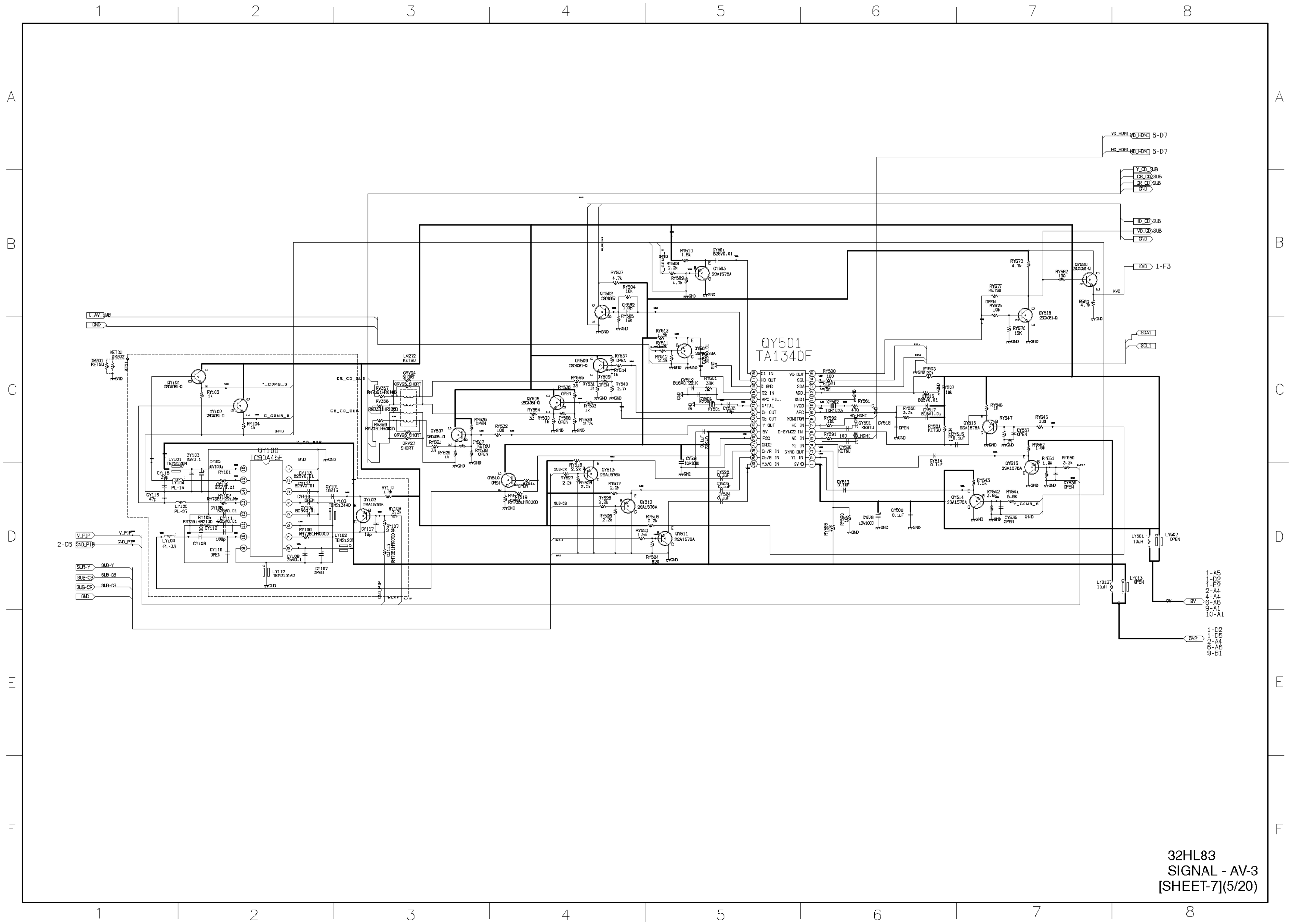

QV254
MM1519XQ
DVI
HDMI
SCL1
SDA1
GND
DVI-PR
DVI-PB
DVI-Y
Y
CB
CR
VD_HDMI
HD_HDMI
8P, 2.5mm, 1.5A
PV14
PV17
LV273
LV270
5V2
5V
Y1
PB1
PR1
SUB-Y
SUB-CB
SUB-CR
2-D6
MY_MC
SY_MC
4-D4
4-D3
4-C4
4-C3
CR_E4
CB_E4
Y_E4
CR_E5
CB_E5
Y_E5
7-A8

32HL83
SIGNAL - AV-2
[SHEET-6](4/20)

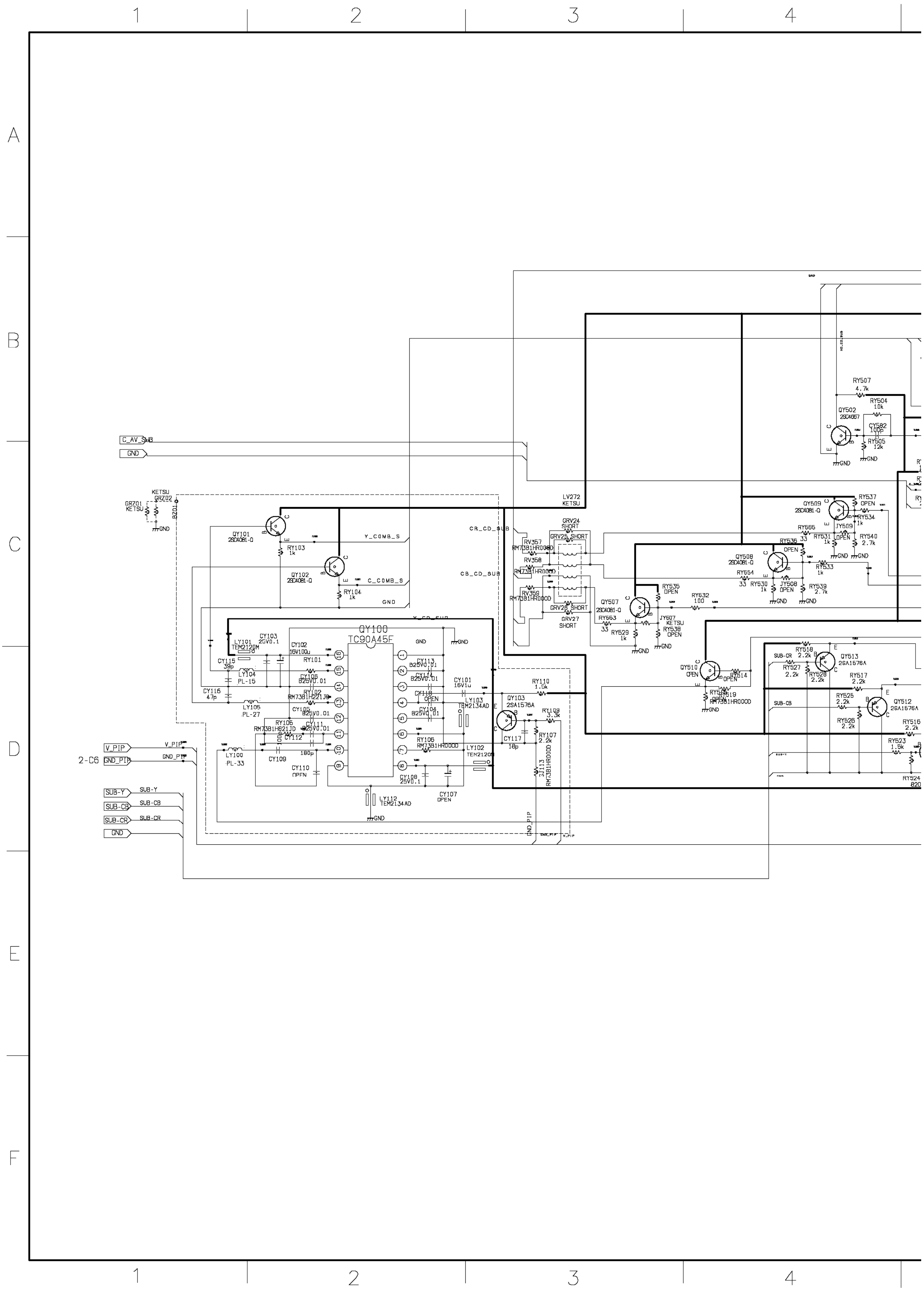

1
2
3
4
A
B
C
D
E
F
2-D6
MY_MC
SY_MC
QV04
2SC4081-Q
QV71
2SC4081T106
RV72
100
RV71
100
RV75
2.2k
RV74
2.2k
RV86
KETSU
RV85
KETSU
GND
CV243
CV239
RV253
RV254
RV255
RV258
RV259
RV260
CV263
0.01
CV259
0.01
CV238
0.01
CV244
0.01
QV254
MM1519XQ
Y_E4
CB_E4
CR_E4
RV323
RV324
RV325
100
CV249
CV250
CV251
1u
DV241
DV242
DV243
MA8091-L
CV248
0.01
CV252
0.01
CV245
CV246
CV247
CV253
CV254
CV255
DV256
DV257
DV258
DV244
DV249
DV250
Y_E5
CB_E5
CR_E5
4-D4
4-D3
4-C4
4-C3
KETSU
LV273
GRV28
SHORT
8P±2.5mm±1.5A±Beige
PV17
SCL1
SDA1
DVI-PR
DVI-PB
DVI-Y
Y
CB
CR
DVI
HDMI

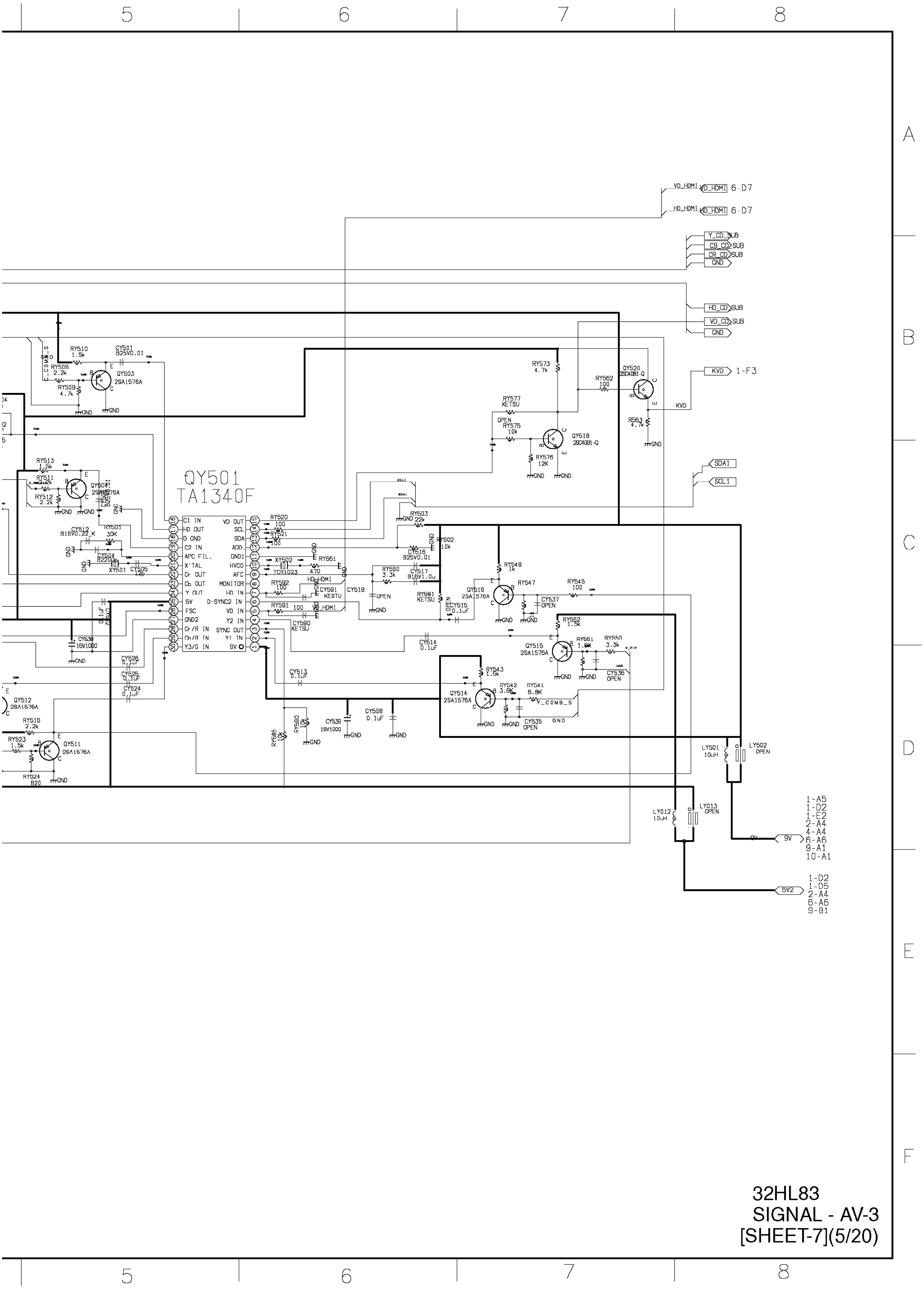

5
6
7
8
A
B
C
D
E
F
CV237
25V0.1
RV260
QV248
2SA1037AK
QV249
2SC2412Y
RV261
GND
5V2
9V
1-D2
1-D5
2-A2
7-E2
9-B4
4-A4
7-D8
9-A1
10-A4
SCL1
SDA1
GND
LV270
10μ
CV258
16V1000
CV257
16V10μ
LV251
TEM2028AH
GRV54
OPEN
GRV55
OPEN
LV252
TEM2028AH
GRV56
OPEN
GRV57
OPEN
GRV58
OPEN
LV253
TEM2028AH
GRV59
OPEN
Y1
PB1
PR1
SUB-Y
SUB-CB
SUB-CR
SUB-D4
MAIN-D4
RV354
33
RV355
33
RV356
33
GR96
SHORT
GRV22
OPEN
GRV30 OPEN
RV351
33
RV352
33
RV353
33
GRV23 OPEN
GRV21
OPEN
LV271
TEM2030AA
SY
SCb
SCr
CV256
0.01
DV252
MA8068-M
RV338
100
RV337
100
DV251
MA8068-M
DV249
MA8091-L
DV250
MA8091-L
CV255
10
VD_HDMI
HD_HDMI
7-A8
GRV30 SHORT
GRV31
SHORT
8P±2.5m±1.5A
PV14
GND
CR
GND
VD_HDMI
HD_HDMI
HDMI

32HL83
SIGNAL - AV-2
[SHEET-6](4/20)

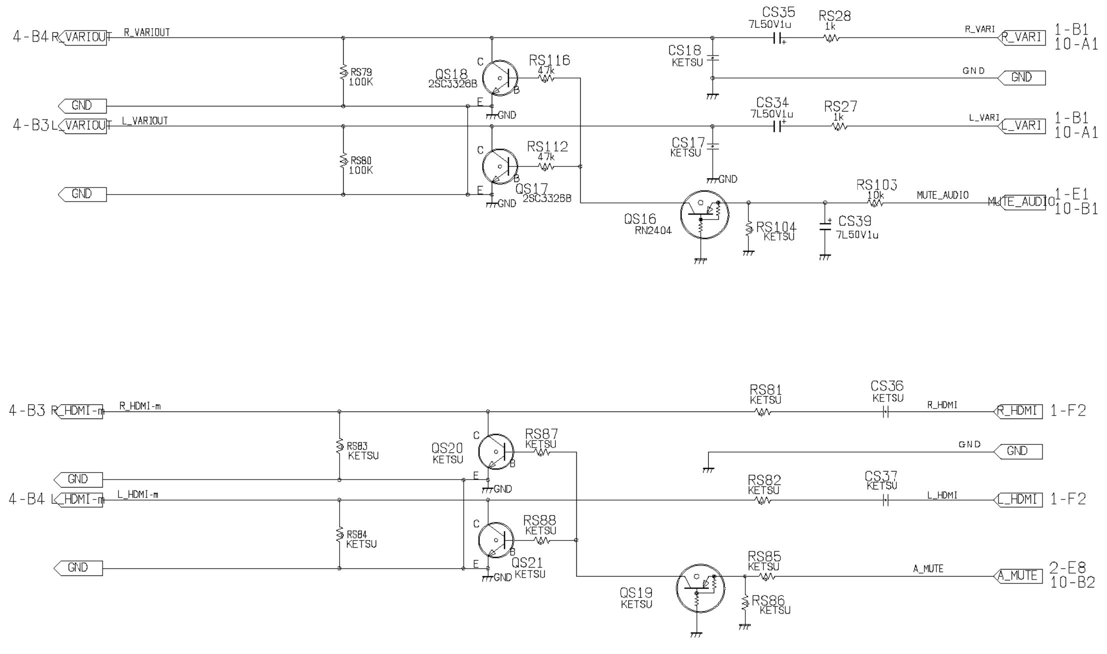

QY501
TA1340F
QY100
TC90A45F
VD_HDMI 5-D7
HD_HDMI 5-D7
Y_CD_SUB
CB_CD_SUB
CR_CD_SUB
GND
HD_CD_SUB
VD_CD_SUB
KVD 1-F3
SDA1
SCL1
C_AV_SW2
V_PIP
2-C6 GND_PIP
SUB-Y
SUB-CB
SUB-CR
5V
1-A5
1-D2
1-E2
2-A4
4-A4
6-A6
9-A1
10-A1
5V2
1-D2
1-D5
2-A4
6-A6
9-B1
Y_COMB_S
C_COMB_S
LY501 10uH
LY502 OPEN
LY012 10uH
LY013 OPEN

32HL83
SIGNAL - AV-3
[SHEET-7](5/20)

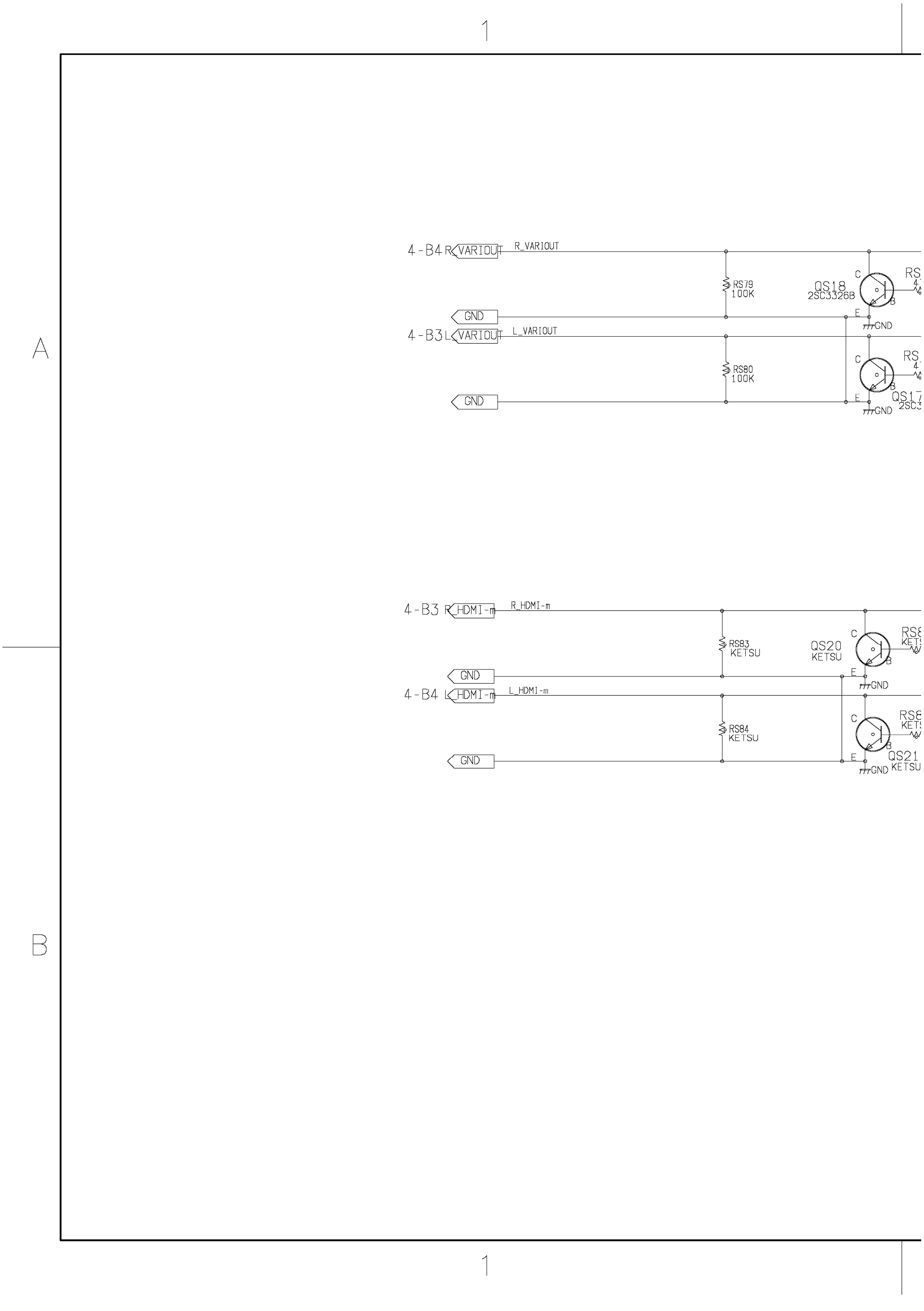

1
2
3
4
A
B
C
D
E
F
C_AV_SUB
GND
KETSU
GRZ02
GRZ01
KETSU
BZ01
GND
QY101
2SC4081-Q
RY103
1k
Y_COMB_S
QY102
2SC4081-Q
RY104
1k
C_COMB_S
GND
QY100
TC90A45F
LY101
TEM2120M
CY103
25V0.1
CY102
16V100u
RY101
CY115
39p
LY104
PL-15
CY106
B25V0.01
CY116
47p
RY102
RM73B1H221JD
LY105
PL-27
CY105
B25V0.01
RY105
RM73B1H821JD
CY111
B25V0.01
CY112
100p
LY100
PL-33
CY109
180p
CY110
OPEN
CY113
B25V0.01
CY114
B25V0.01
CY118
OPEN
CY104
B25V0.01
RY106
RM73B1HR000D
LY102
TEM2120M
CY108
25V0.1
CY107
OPEN
LY112
TEM2134AD
GND
CY101
16V1u
LY103
TEM2134AD
QY103
2SA1576A
CY117
18p
RY110
1.5k
RY109
3.3k
RY107
2.2k
3J113
RM73B1HR000D
GND_PIP
V_PIP
V_PIP
GND_PIP
2-C6
SUB-Y
SUB-CB
SUB-CR
GND
LV272
KETSU
CR_CD_SUB
CB_CD_SUB
Y_CD_SUB
RV357
RM73B1HR000D
RV358
RM73B1HR000D
RV359
RM73B1HR000D
GRV24
SHORT
GRV25 SHORT
GRV26 SHORT
GRV27
SHORT
QY507
2SC4081-Q
RY553
33
RY529
1k
JY507
KETSU
RY538
OPEN
RY535
OPEN
RY532
100
GND
QY508
2SC4081-Q
RY536
OPEN
RY554
33
RY530
1k
JY508
OPEN
RY539
2.7k
RY533
1k
QY509
2SC4081-Q
RY537
OPEN
RY534
1k
RY555
33
RY531
1k
JY509
OPEN
RY540
2.7k
QY502
2SC4657
RY507
4.7k
RY504
10k
CY582
100p
RY505
12k
GND
QY510
OPEN
RY514
OPEN
RY515
OPEN
RY519
RM73B1HR000D
SUB-CR
RY518
2.2k
RY527
2.2k
RY528
2.2k
QY513
2SA1576A
RY517
2.2k
SUB-CB
RY525
2.2k
RY526
2.2k
QY512
2SA1576A
RY516
2.2k
RY523
1.5k
RY524
820
SUB-Y
GND

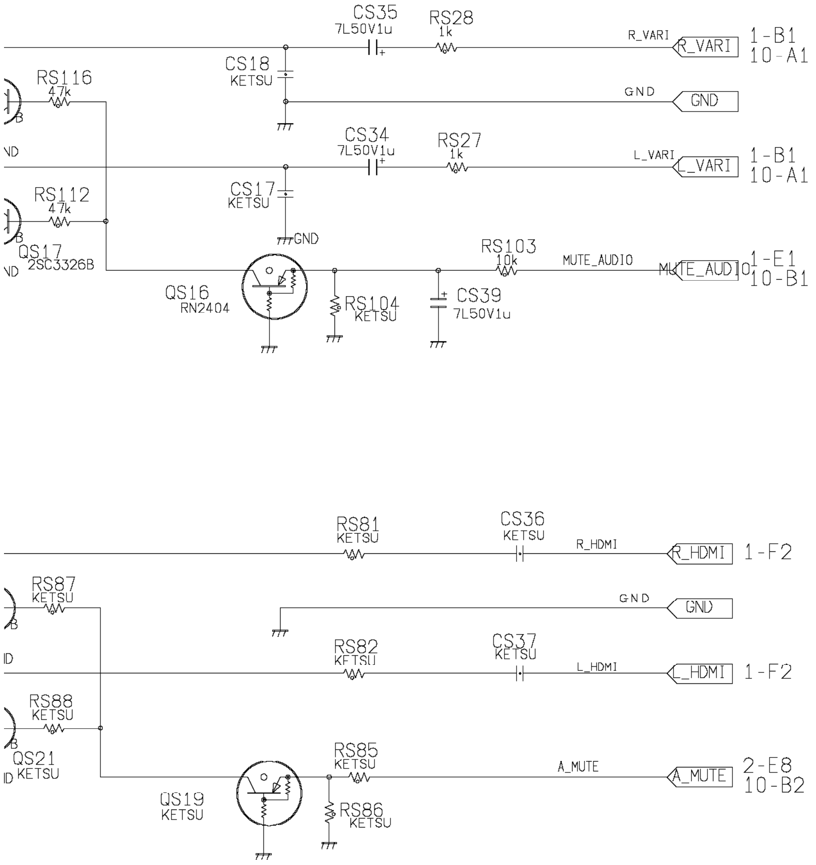

5
6
7
8
A
B
C
D
E
F
QY501
TA1340F
C1 IN
HD OUT
D GND
C2 IN
APC FIL.
X'TAL
Cr OUT
Cb OUT
Y OUT
5V
FSC
GND2
Cr/R IN
Cb/R IN
Y3/G IN
VD OUT
SCL
SDA
ADD
GND1
HVCO
AFC
MONITOR
HD IN
D-SYNC2 IN
VD IN
Y2 IN
SYNC OUT
Y1 IN
9V
VD_HDMI 6-D7
HD_HDMI 6-D7
Y_CD_SUB
CB_CD_SUB
CR_CD_SUB
GND
HD_CD_SUB
VD_CD_SUB
KVD 1-F3
SDA1
SCL1
RY510 1.5k
CY501 B25V0.01
RY508 2.2k
RY509 4.7k
QY503 2SA1576A
RY573 4.7k
RY562 100
QY520 2SC4081-Q
RY577 KETSU
RY575 10k
QY518 2SC4081-Q
RY576 12K
R563 4.7k
RY513 1.5k
RY511
RY512 2.2k
QY504 2SA1576A
CY512 B16V0.22_K
RY501 30K
CY504 B220P
XY501
CY505
RY520 100
RY521 100
RY503 22k
RY502 10k
CY516 B25V0.01
XY502 TCR1023
RY561 470
RY550 3.3k
CY517 B16V1.0u
RY592 100
CY591 KESTU
CY518
RY591 100
CY590 KETSU
RY581 KETSU
CY515 0.1uF
RY548 1k
QY516 2SA1576A
RY547
RY545 100
CY537 OPEN
RY552 1.5k
CY614 0.1uF
QY515 2SA1576A
RY551 1.8K
RY550 3.3k
CY536 OPEN
CY530 16V1000
CY526 0.1uF
CY525 0.1uF
CY524 0.1uF
CY513 0.1uF
RY543 1.5k
QY514 2SA1576A
RY542 3.9K
RY541 6.8K
Y_COMB_S
CY535 OPEN
CY539 16V1000
CY508 0.1uF
RY585
RY590 10k
QY512 2SA1576A
RY516 2.2k
RY523 1.5k
QY511 2SA1576A
RY524 820
LY501 10uH
LY502 OPEN
LY012 10uH
LY013 OPEN
9V
1-A5
1-D2
1-E2
2-A4
4-A4
6-A6
9-A1
10-A1
5V2
1-D2
1-D5
2-A4
6-A6
9-B1
GND

32HL83
SIGNAL - AV-3
[SHEET-7](5/20)


4-B4 R_VARIOUT
R_VARIOUT
GND
4-B3 L_VARIOUT
L_VARIOUT
GND
RS79 100K
RS80 100K
QS18 2SC3326B
QS17 2SC3326B
RS116 47k
RS112 47k
C
B
E
GND
CS18 KETSU
CS17 KETSU
CS35 7L50V1u
CS34 7L50V1u
RS28 1k
RS27 1k
R_VARI
L_VARI
GND
1-B1 10-A1
1-B1 10-A1
QS16 RN2404
RS104 KETSU
CS39 7L50V1u
RS103 10k
MUTE_AUDIO
1-E1 10-B1
4-B3 R_HDMI-m
R_HDMI-m
4-B4 L_HDMI-m
L_HDMI-m
RS83 KETSU
RS84 KETSU
QS20 KETSU
QS21 KETSU
RS87 KETSU
RS88 KETSU
RS81 KETSU
RS82 KETSU
CS36 KETSU
CS37 KETSU
R_HDMI
L_HDMI
1-F2
1-F2
QS19 KETSU
RS85 KETSU
RS86 KETSU
A_MUTE
2-E8 10-B2

32HL83
SIGNAL - VARI-OUTPUT/HDMI-Mute
[SHEET-8](6/20)

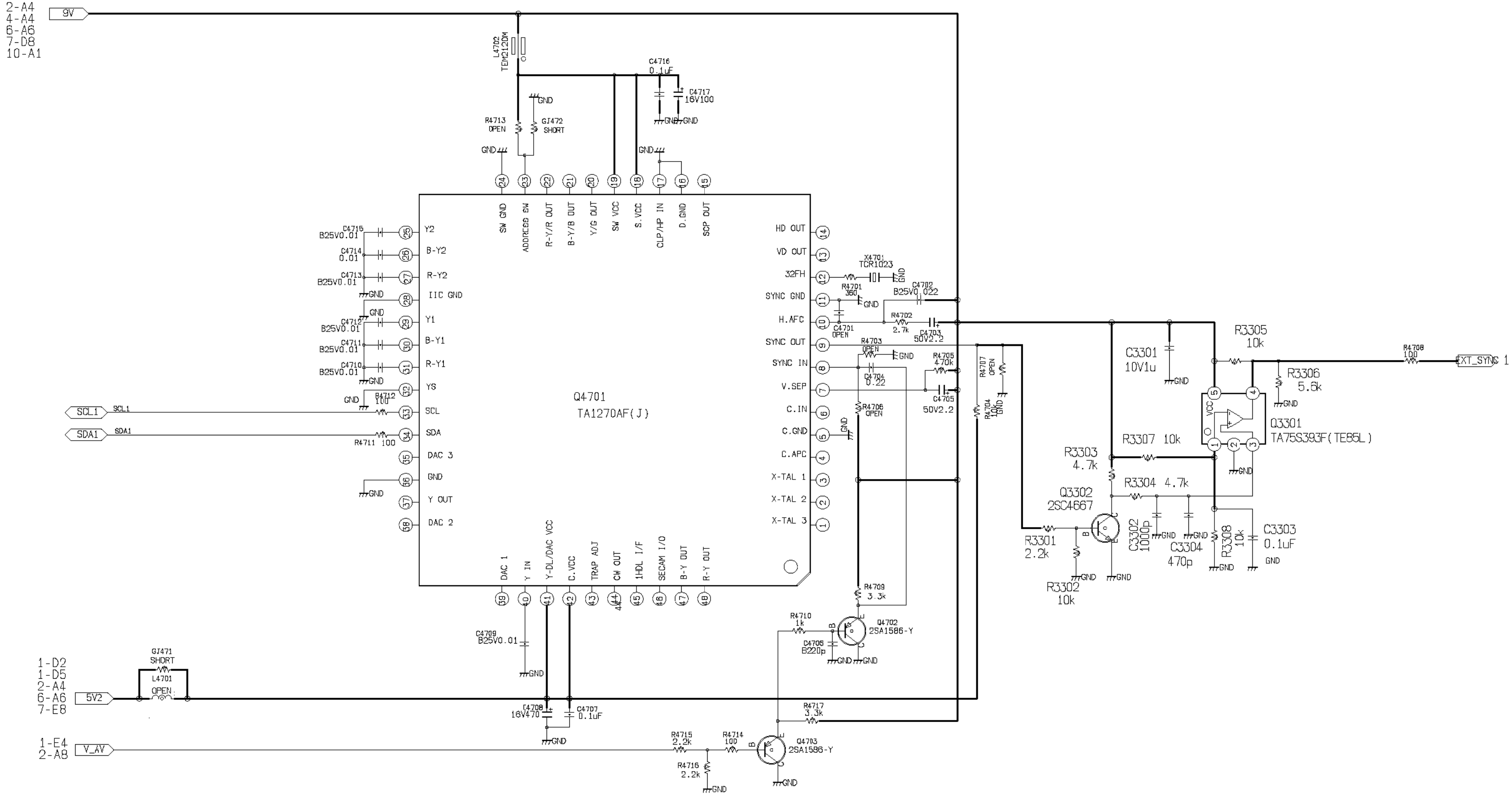

1
A
B
4-B4
R_VARIOUT
R_VARIOUT
RS79
100K
QS18
2SC3326B
C
B
E
GND
GND
RS
4-B3
L_VARIOUT
L_VARIOUT
RS80
100K
C
B
E
GND
QS17
2SC
RS
GND
4-B3
R_HDMI-m
R_HDMI-m
RS83
KETSU
QS20
KETSU
C
B
E
GND
RS8
KETS
GND
4-B4
L_HDMI-m
L_HDMI-m
RS84
KETSU
C
B
E
RS8
KETS
QS21
KETSU
GND
GND
1


CS35
7L50V1u
RS28
1k
R_VARI
R_VARI
1-B1
10-A1
CS18
KETSU
RS116
47k
GND
GND
CS34
7L50V1u
RS27
1k
L_VARI
L_VARI
1-B1
10-A1
CS17
KETSU
RS112
47k
GND
QS17
2SC3326B
RS103
10k
MUTE_AUDIO
MUTE_AUDIO
1-E1
10-B1
QS16
RN2404
RS104
KETSU
CS39
7L50V1u
RS81
KETSU
CS36
KETSU
R_HDMI
R_HDMI
1-F2
RS87
KETSU
GND
GND
RS82
KETSU
CS37
KETSU
L_HDMI
L_HDMI
1-F2
RS88
KETSU
QS21
KETSU
RS85
KETSU
A_MUTE
A_MUTE
2-E8
10-B2
QS19
KETSU
RS86
KETSU

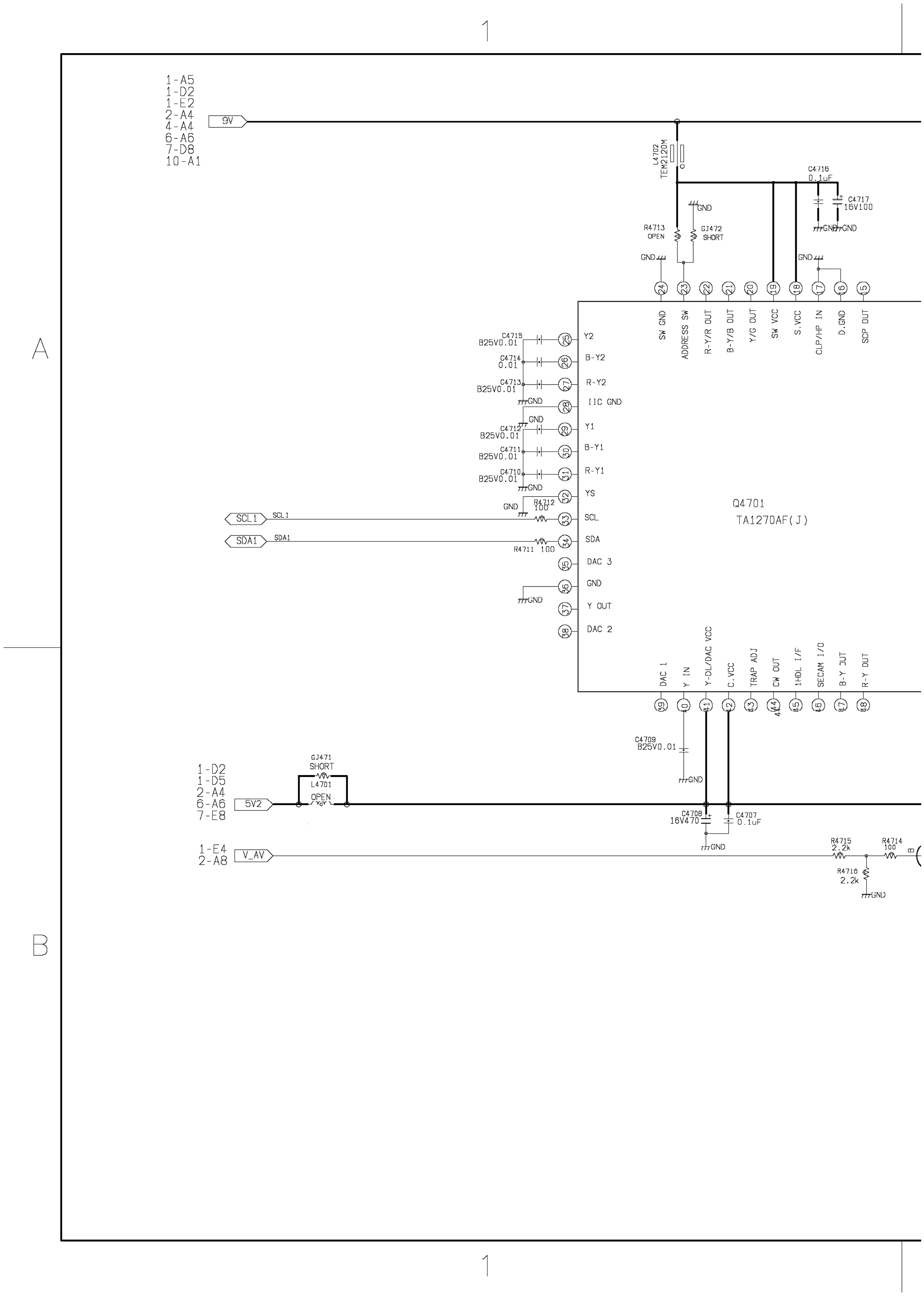
A

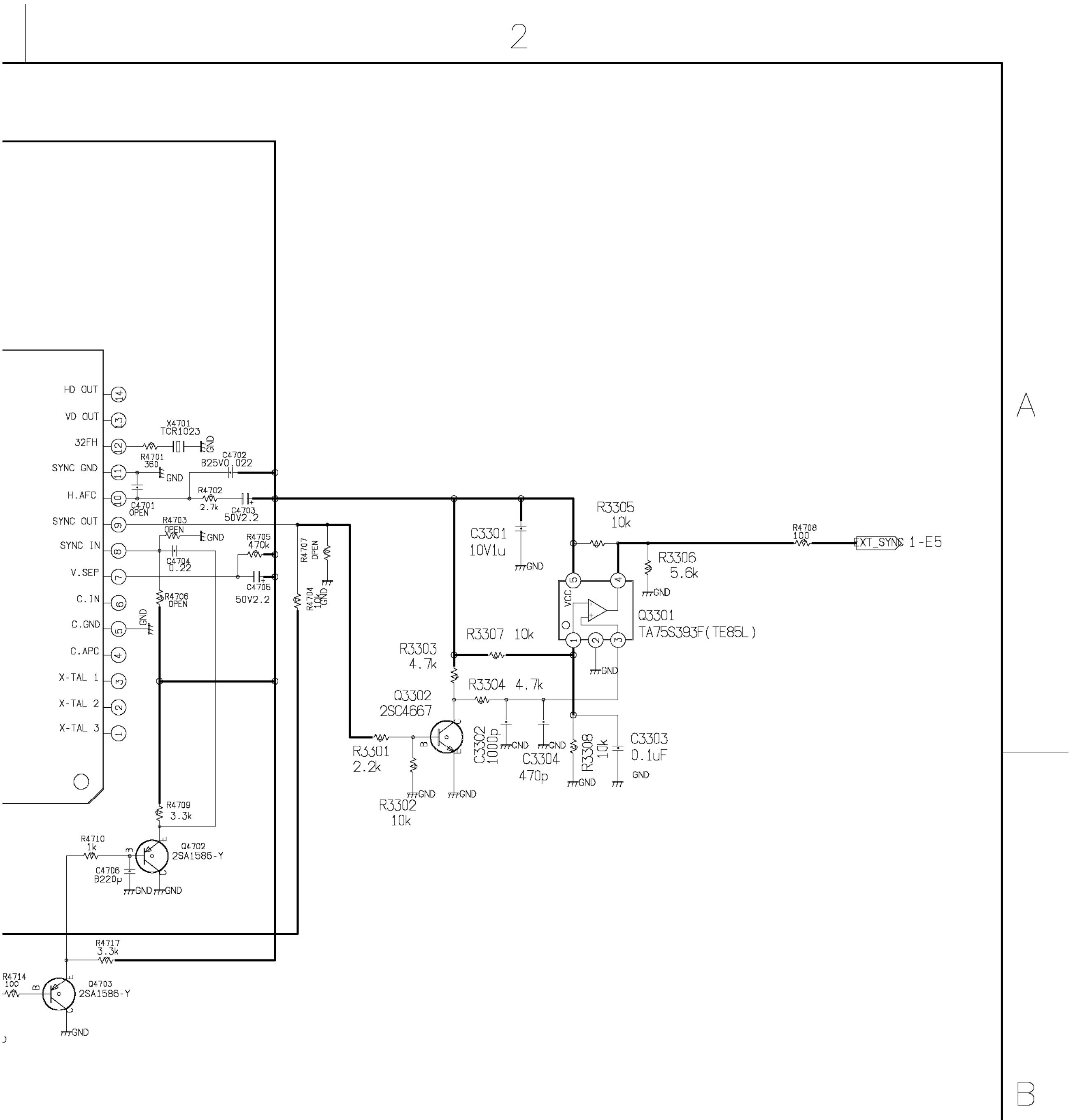
B

32HL83
SIGNAL - VARI-OUTPUT/HDMI-Mute
[SHEET-8](6/20)


1-A5
1-D2
1-E2
2-A4
4-A4
6-A6
7-D8
10-A1
9V
L4702
TEM120M
C4716
0.1uF
C4717
16V100
R4713
OPEN
GJ472
SHORT
GND
Q4701
TA1270AF(J)
SW GND
ADDRESS SW
R-Y/R OUT
B-Y/B OUT
Y/G OUT
SW VCC
S.VCC
CLP/HP IN
D.GND
SCP OUT
HD OUT
VD OUT
32FH
SYNC GND
H.AFC
SYNC OUT
SYNC IN
V.SEP
C.IN
C.GND
C.APC
X-TAL 1
X-TAL 2
X-TAL 3
Y2
B-Y2
R-Y2
IIC GND
Y1
B-Y1
R-Y1
YS
SCL
SDA
DAC 3
GND
Y OUT
DAC 2
DAC 1
Y IN
Y-DL/DAC VCC
C.VCC
TRAP ADJ
CW OUT
1HDL I/F
SECAM I/O
B-Y OUT
R-Y OUT
C4715
B25V0.01
C4714
0.01
C4713
B25V0.01
C4712
B25V0.01
C4711
B25V0.01
C4710
B25V0.01
R4712
100
R4711 100
SCL1
SDA1
X4701
TCR1023
C4702
B25V0.022
R4701
360
C4701
OPEN
R4702
2.7k
C4703
50V2.2
R4703
OPEN
R4705
470k
R4707
OPEN
C4704
0.22
C4705
50V2.2
R4704
10k
R4706
OPEN
R4709
3.3k
R4710
1k
Q4702
2SA1586-Y
C4706
B220p
C4709
B25V0.01
1-D2
1-D5
2-A4
6-A6
7-E8
5V2
GJ471
SHORT
L4701
OPEN
C4708
16V470
C4707
0.1uF
R4717
3.3k
1-E4
2-A8
V_AV
R4715
2.2k
R4714
100
R4716
2.2k
Q4703
2SA1586-Y
C3301
10V1u
R3305
10k
R4708
100
EXT_SYNC
1-E5
R3306
5.5k
VCC
Q3301
TA75S393F(TE85L)
R3307 10k
R3303
4.7k
Q3302
2SC4667
R3304 4.7k
R3301
2.2k
R3302
10k
C3302
1000p
C3304
470p
R3308
10k
C3303
0.1uF
A
B
1
2

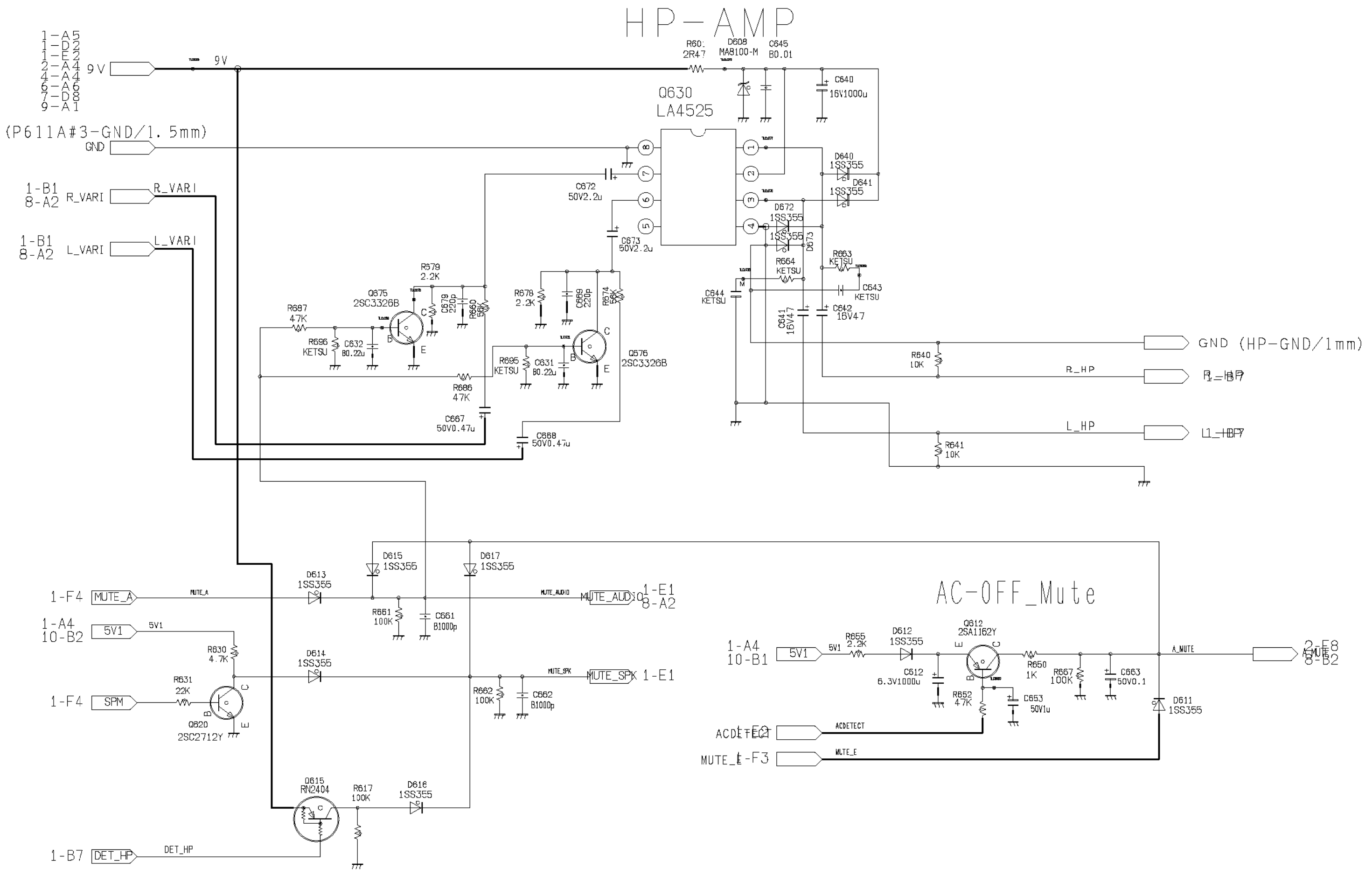
32HL83
SIGNAL - SYNC OUT
[SHEET-9](7/20)


1
A
B
1-A5
1-D2
1-E2
2-A4
4-A4
6-A6
7-D8
10-A1
9V
L4702
TEM2120M
C4716
0.1uF
C4717
16V100
GND
R4713
OPEN
GJ472
SHORT
24 SW GND
23 ADDRESS SW
22 R-Y/R OUT
21 B-Y/B OUT
20 Y/G OUT
19 SW VCC
18 S.VCC
17 CLP/HP IN
16 D.GND
15 SCP OUT
C4715
B25V0.01
25 Y2
C4714
0.01
26 B-Y2
C4713
B25V0.01
27 R-Y2
28 IIC GND
C4712
B25V0.01
29 Y1
C4711
B25V0.01
30 B-Y1
C4710
B25V0.01
31 R-Y1
32 YS
R4712
100
33 SCL
34 SDA
R4711 100
35 DAC 3
36 GND
37 Y OUT
38 DAC 2
SCL1
SDA1
Q4701
TA1270AF(J)
39 DAC 1
40 Y IN
41 Y-DL/DAC VCC
42 C.VCC
43 TRAP ADJ
44 CW OUT
45 1HDL I/F
46 SECAM I/O
47 B-Y OUT
48 R-Y OUT
C4709
B25V0.01
1-D2
1-D5
2-A4
6-A6
7-E8
5V2
GJ471
SHORT
L4701
OPEN
C4708
16V470
C4707
0.1uF
1-E4
2-A8
V_AV
R4715
2.2k
R4714
100
R4716
2.2k
B

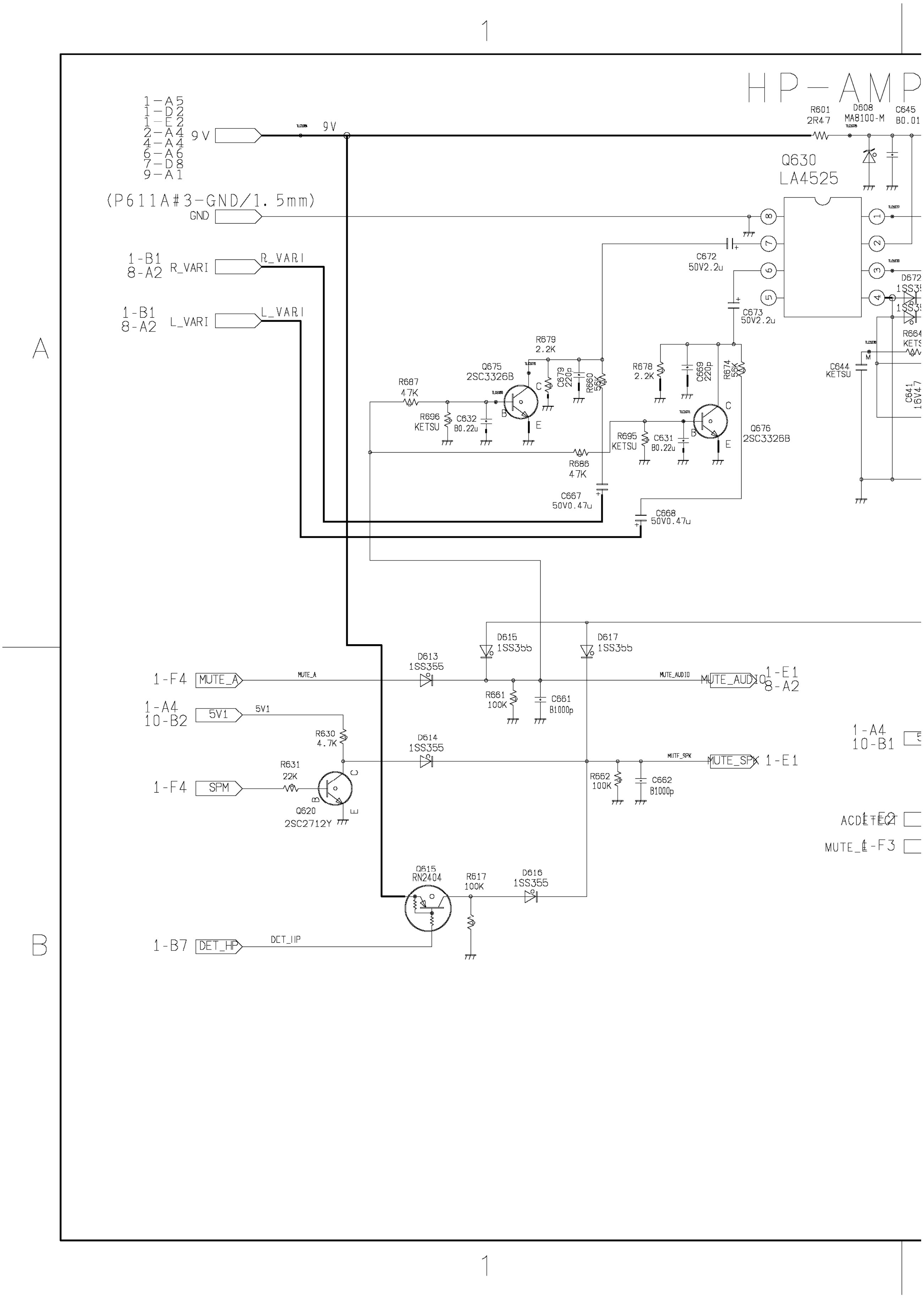

2
A
B
HD OUT
VD OUT
32FH
SYNC GND
H.AFC
SYNC OUT
SYNC IN
V.SEP
C.IN
C.GND
C.APC
X-TAL 1
X-TAL 2
X-TAL 3
14
13
12
11
10
9
8
7
6
5
4
3
2
1
X4701
TCR1023
GND
R4701
360
GND
C4702
B25V0.022
C4701
OPEN
R4702
2.7k
C4703
50V2.2
R4703
OPEN
GND
R4705
470k
C4704
0.22
C4705
50V2.2
R4707
OPEN
R4704
10k
GND
R4706
OPEN
GND
C3301
10V1u
GND
R3305
10k
R4708
100
EXT_SYNC 1-E5
R3306
5.6k
GND
VCC
Q3301
TA75S393F(TE85L)
R3307 10k
GND
R3303
4.7k
R3304 4.7k
Q3302
2SC4667
C3302
1000p
GND
GND
C3304
470p
R3308
10k
GND
C3303
0.1uF
GND
R3301
2.2k
R3302
10k
GND
GND
B
C
E
R4709
3.3k
R4710
1k
Q4702
2SA1586-Y
C4706
B220p
GND
GND
R4717
3.3k
R4714
100
Q4703
2SA1586-Y
GND

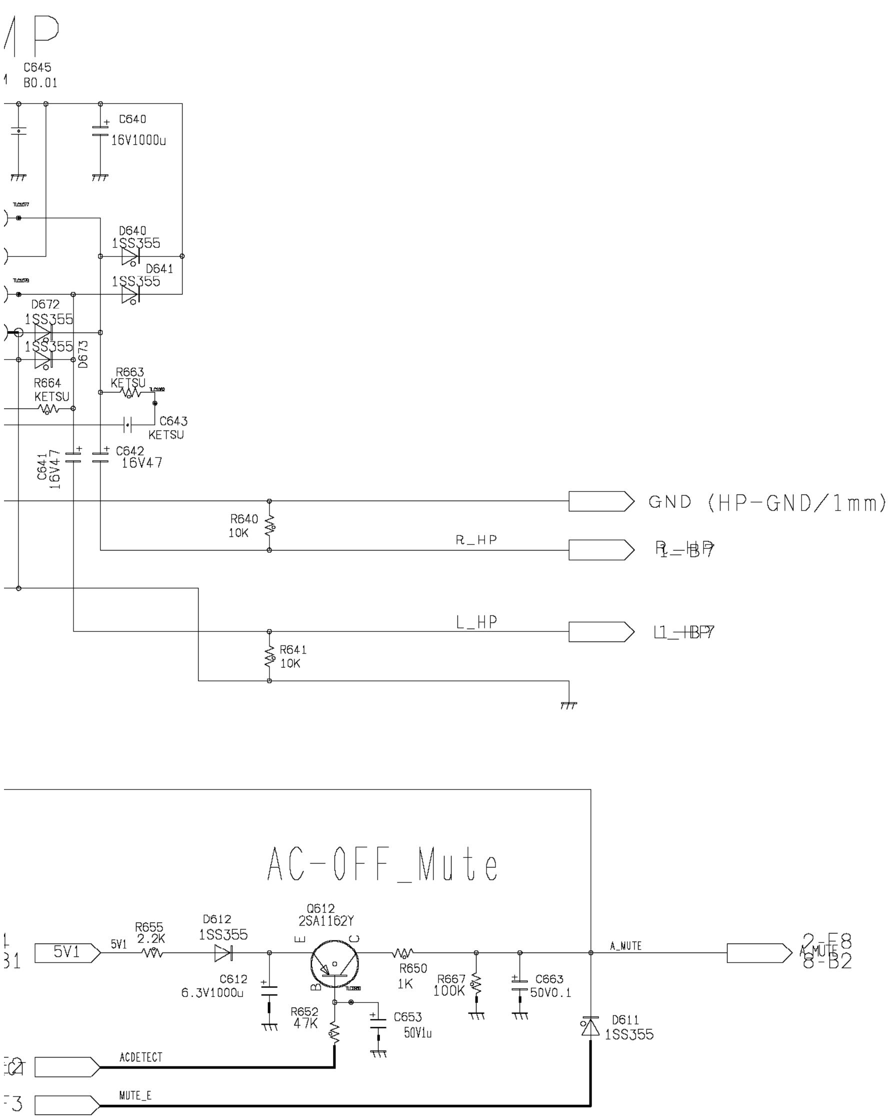
32HL83
SIGNAL - SYNC OUT
[SHEET-9](7/20)

2


HP-AMP
AC-OFF_Mute
1-A5
1-D2
1-E2
2-A4
4-A4
6-A6
7-D8
9-A1
9V
(P611A#3-GND/1.5mm)
GND
1-B1
8-A2
R_VARI
L_VARI
R60
2R47
D608
MA8100-M
C645
B0.01
C640
16V1000u
Q630
LA4525
D640
1SS355
D641
1SS355
D672
1SS355
D673
1SS355
C672
50V2.2u
C673
50V2.2u
R663
KETSU
R664
KETSU
C643
KETSU
C644
KETSU
C641
16V47
C642
16V47
R579
2.2K
Q675
2SC3326B
R687
47K
R696
KETSU
C632
B0.22u
C579
220p
R660
56K
R678
2.2K
C669
220p
R674
56K
Q676
2SC3326B
R695
KETSU
C631
B0.22u
R686
47K
C667
50V0.47u
C668
50V0.47u
GND (HP-GND/1mm)
R640
10K
R_HP
L_HP
R641
10K
D615
1SS355
D617
1SS355
1-F4
MUTE_A
D613
1SS355
MUTE_AUDIO
1-E1
8-A2
R661
100K
C661
B1000p
1-A4
10-B2
5V1
R630
4.7K
D614
1SS355
MUTE_SPK
1-E1
R631
22K
1-F4
SPM
Q620
2SC2712Y
R662
100K
C662
B1000p
Q615
RN2404
R617
100K
D616
1SS355
1-B7
DET_HP
1-A4
10-B1
R655
2.2K
D612
1SS355
Q612
2SA1162Y
C612
6.3V1000u
R652
4.7K
C653
50V1u
R650
1K
R667
100K
C663
50V0.1
A_MUTE
2-E8
8-B2
D611
1SS355
ACDETECT
1-E2
MUTE_E
1-F3
B
C
E

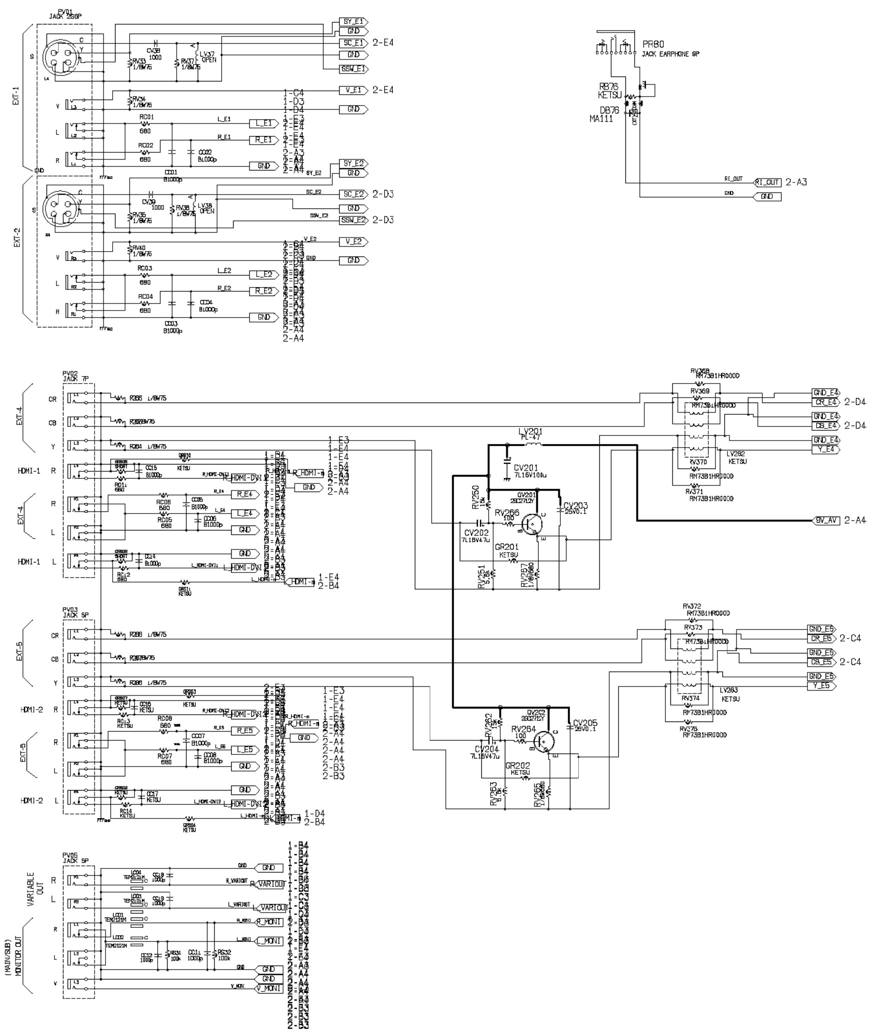
32HL83
SIGNAL - HP-AMP&MUTE
[SHEET-10](8/20)


1
HP-AMP
1-A5
1-D2
1-E2
2-A4
4-A4
6-A6
7-D8
9-A1
9V
9V
(P611A#3-GND/1.5mm)
GND
1-B1
8-A2
R_VARI
R_VARI
1-B1
8-A2
L_VARI
L_VARI
A
R601
2R47
D608
MA8100-M
C645
B0.01
Q630
LA4525
C672
50V2.2u
C673
50V2.2u
D672
1SS35
1SS35
R664
KETS
C644
KETSU
C641
16V47
R679
2.2K
Q675
2SC3326B
C679
220p
R660
56K
R687
47K
R696
KETSU
C632
B0.22u
R678
2.2K
C669
220p
R674
56K
Q676
2SC3326B
R695
KETSU
C631
B0.22u
R686
47K
C667
50V0.47u
C668
50V0.47u
D615
1SS355
D617
1SS355
D613
1SS355
1-F4
MUTE_A
MUTE_A
R661
100K
C661
B1000p
MUTE_AUDIO
MUTE_AUDIO
1-E1
8-A2
1-A4
10-B2
5V1
5V1
R630
4.7K
D614
1SS355
R631
22K
1-F4
SPM
Q620
2SC2712Y
R662
100K
C662
B1000p
MUTE_SPK
MUTE_SPK
1-E1
1-A4
10-B1
ACDETECT
1-E2
MUTE_E
1-F3
Q615
RN2404
R617
100K
D616
1SS355
B
1-B7
DET_HP
DET_HP
1

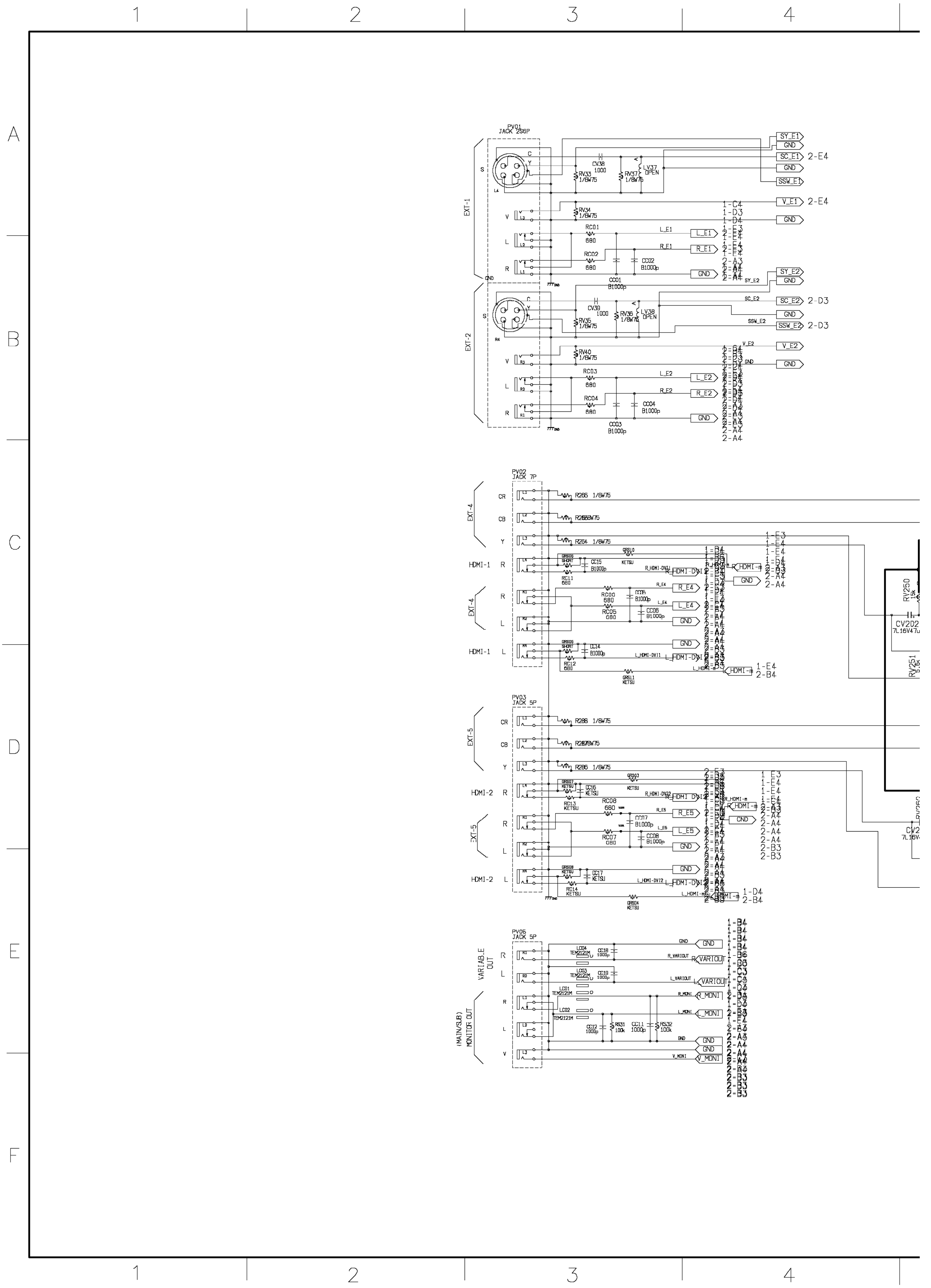

MP
C645
B0.01
C640
16V1000u
D640
1SS355
D641
1SS355
D672
1SS355
1SS355
D673
R663
KETSU
R664
KETSU
C643
KETSU
C641
16V47
C642
16V47
GND (HP-GND/1mm)
R640
10K
R_HP
R_HP
1-B7
L_HP
L_HP
1-B7
R641
10K
AC-OFF_Mute
5V1
5V1
R655
2.2K
D612
1SS355
Q612
2SA1162Y
E
C
B
C612
6.3V1000u
R652
47K
C653
50V1u
R650
1K
R667
100K
C663
50V0.1
A_MUTE
A_MUTE
2-F8
8-B2
D611
1SS355
ACDETECT
MUTE_E
A
B

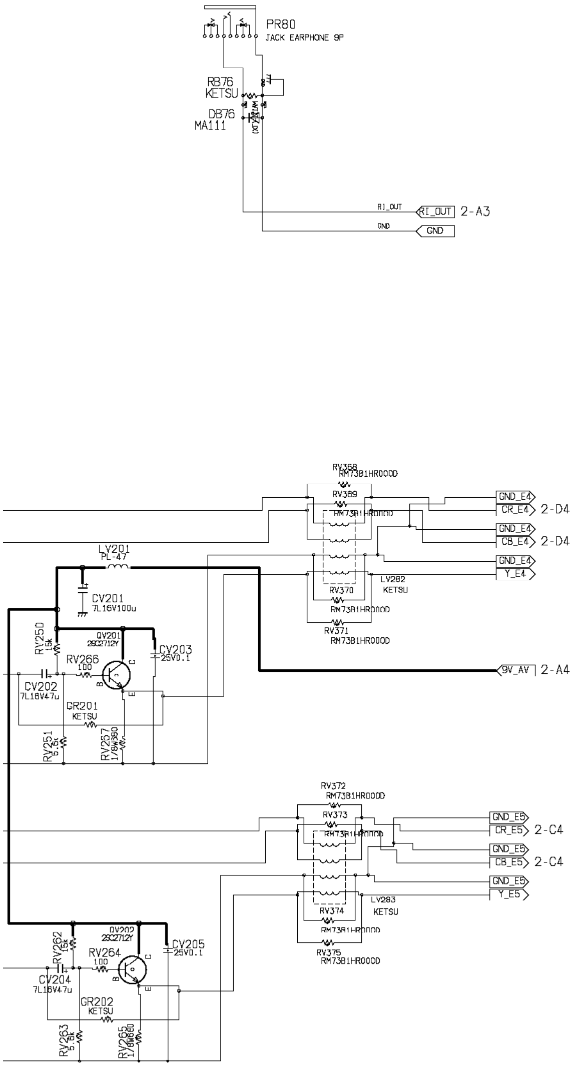
32HL83
SIGNAL - HP-AMP&MUTE
[SHEET-10](8/20)

)

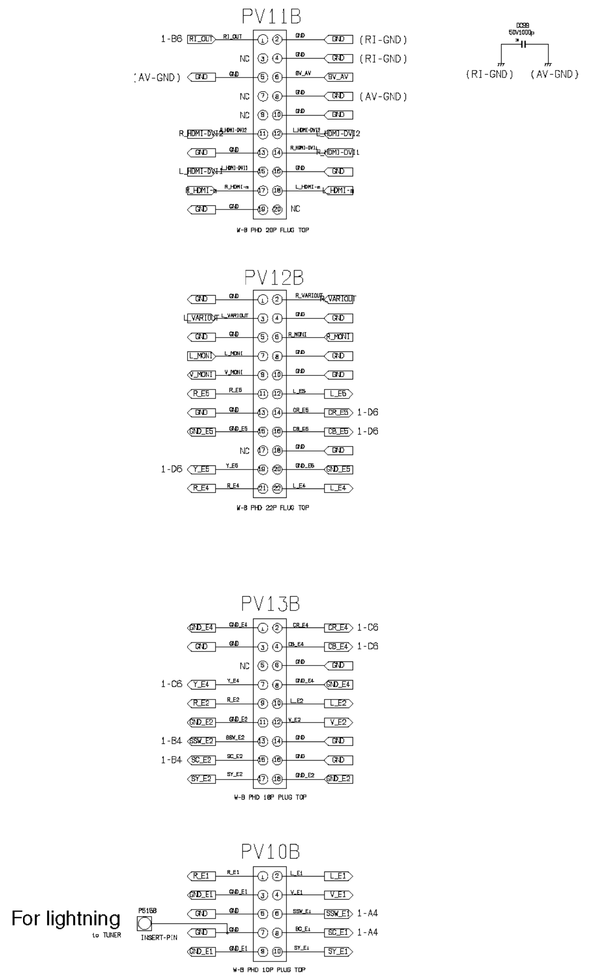

PV01
JACK 2S6P
EXT-1
EXT-2
S
C
Y
GND
V
L
R
CV38
1000
CV39
1000
RV33
1/8W75
RV37
1/8W75
RV35
1/8W75
RV36
1/8W75
LV37
OPEN
LV38
OPEN
RV34
1/8W75
RV40
1/8W75
RC01
680
RC02
680
RC03
680
RC04
680
CC01
B1000p
CC02
B1000p
CC03
B1000p
CC04
B1000p
SY_E1
SC_E1
SSW_E1
V_E1
L_E1
R_E1
SY_E2
SC_E2
SSW_E2
V_E2
L_E2
R_E2
2-E4
2-D3
PRB0
JACK EARPHONE 6P
RB76
KETSU
DB76
MA111
RI_OUT
2-A3
PV02
JACK 7P
PV03
JACK 5P
EXT-4
EXT-5
HDMI-1
HDMI-2
CR
CB
Y
R286 1/8W75
R284 1/8W75
R288 1/8W75
CC15
B1000p
CC14
B1000p
CC16
KETSU
CC17
KETSU
RC11
680
RC12
680
RC13
KETSU
RC14
KETSU
RC05
680
RC06
680
RC07
680
RC08
680
CC05
B1000p
CC06
B1000p
CC07
B1000p
CC08
B1000p
GR810
KETSU
GR811
KETSU
GR803
KETSU
GR804
KETSU
R_HDMI-DVI1
L_HDMI-DVI1
R_HDMI-DVI2
L_HDMI-DVI2
HDMI-DVI1
HDMI-DVI2
R_HDMI-m
L_HDMI-m
R_E4
L_E4
R_E5
L_E5
1-E3
1-E4
1-D4
2-B4
2-A4
2-B3
LV201
PL-47
CV201
7L16V100u
CV202
7L16V47u
CV203
25V0.1
QV201
2SC2712Y
RV250
15k
RV266
100
GR201
KETSU
RV251
5.6k
RV257
1/8W680
CV204
7L16V47u
CV205
25V0.1
QV202
2SC2712Y
RV262
15k
RV264
100
GR202
KETSU
RV263
5.6k
RV265
1/8W680
B
C
E
RV368
RM73B1HR000D
RV369
RM73B1HR000D
RV370
RM73B1HR000D
RV371
RM73B1HR000D
LV282
KETSU
RV372
RM73B1HR000D
RV373
RM73B1HR000D
RV374
RM73B1HR000D
RV375
RM73B1HR000D
LV283
KETSU
GND_E4
CR_E4
CB_E4
Y_E4
GND_E5
CR_E5
CB_E5
Y_E5
2-D4
2-C4
9V_AV
PV05
JACK 5P
VARIABLE
OUT
(MAIN/SUB)
MONITOR OUT
LC01
TEM2121M
LC02
TEM2121M
LC03
TEM2121M
LC04
TEM2121M
CC18
1000p
CC19
1000p
CC11
1000p
CC12
1000p
RS31
100k
RS32
100k
R_VARIOUT
L_VARIOUT
VARIOUT
R_MONI
L_MONI
V_MONI

32HL83
BACK AV - BACK-AV1
[SHEET-1](9/20)


1
2
3
4
A
B
C
D
E
F
PV01
JACK 2S6P
EXT-1
S
V
L
R
CV38 1000
RV33 1/8W75
RV37 1/8W75
LV37 OPEN
RV34 1/8W75
RC01 680
RC02 680
CC01 B1000p
CC02 B1000p
SY_E1
GND
SC_E1
SSW_E1
V_E1
L_E1
R_E1
2-E4
EXT-2
CV39 1000
RV35 1/8W75
RV36 1/8W75
LV38 OPEN
RV40 1/8W75
RC03 680
RC04 680
CC03 B1000p
CC04 B1000p
SY_E2
SC_E2
SSW_E2
V_E2
L_E2
R_E2
2-D3
PV02
JACK 7P
EXT-4
CR
CB
Y
HDMI-1
R266 1/8W75
R264 1/8W75
CC15 B1000p
RC11 680
RC00 680
RC05 680
CC05 B1000p
CC06 B1000p
CC14 B1000p
RC12 680
R_E4
L_E4
HDMI-DVI1
HDMI-m
KETSU
SHORT
RV250 15k
CV202 7L16V47u
RV251
PV03
JACK 5P
EXT-5
HDMI-2
R288 1/8W75
R286 1/8W75
CC16 KETSU
RC13 KETSU
RC08 680
RC07 680
CC07 B1000p
CC08 B1000p
CC17 KETSU
RC14 KETSU
R_E5
L_E5
HDMI-DVI2
PV06
JACK 5P
VARIABLE OUT
(MAIN/SUB) MONITOR OUT
LC04 TEM2121M
LC03 TEM2121M
LC01 TEM2121M
LC02 TEM2121M
CC18 1000p
CC19 1000p
CC12 1000p
CC11 1000p
RS31 100k
RS32 100k
R_VARIOUT
L_VARIOUT
R_MONI
L_MONI
V_MONI
1-C4
1-D3
1-D4
1-E3
1-E4
1-D4
2-A4
2-B3
2-B4

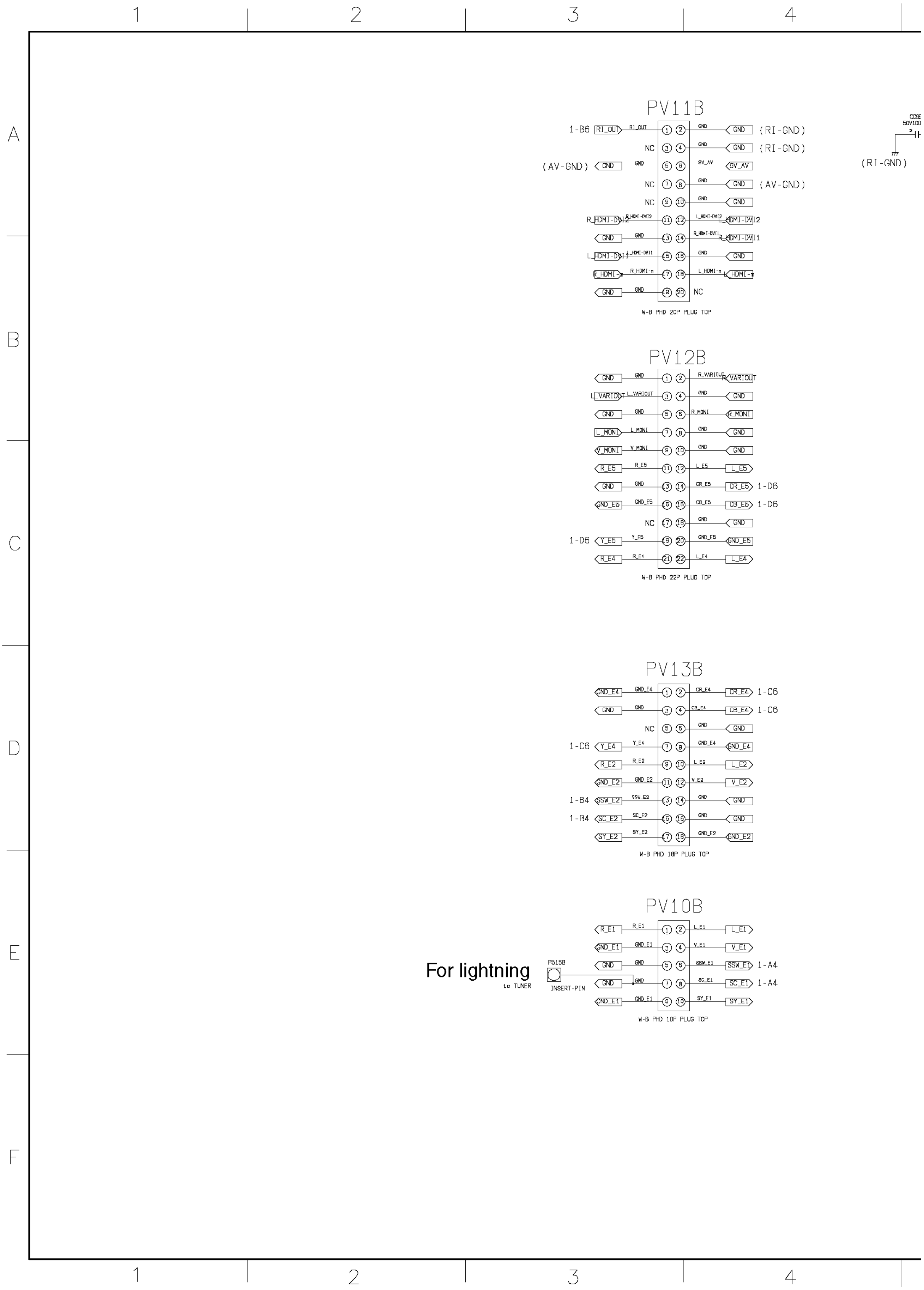

5
6
7
8
A
B
C
D
E
F
PR80
JACK EARPHONE 9P
RB76
KETSU
DB76
MA111
RI_OUT
RI_OUT 2-A3
GND
GND
RV368
RM73B1HR000D
RV369
RM73B1HR000D
GND_E4
CR_E4 2-D4
GND_E4
CB_E4 2-D4
GND_E4
Y_E4
LV282
KETSU
RV370
RM73B1HR000D
RV371
RM73B1HR000D
LV201
PL-47
CV201
7L16V100u
RV250
15k
QV201
2SC2712Y
CV203
25V0.1
RV266
100
CV202
7L16V47u
GR201
KETSU
RV251
5.6k
RV267
1/8W390
9V_AV 2-A4
RV372
RM73B1HR000D
RV373
RM73B1HR000D
GND_E5
CR_E5 2-C4
GND_E5
CB_E5 2-C4
GND_E5
Y_E5
LV283
KETSU
RV374
RM73B1HR000D
RV375
RM73B1HR000D
RV262
15k
QV202
2SC2712Y
CV205
25V0.1
RV264
100
CV204
7L16V47u
GR202
KETSU
RV263
5.6k
RV265
1/8W680
B
C
E

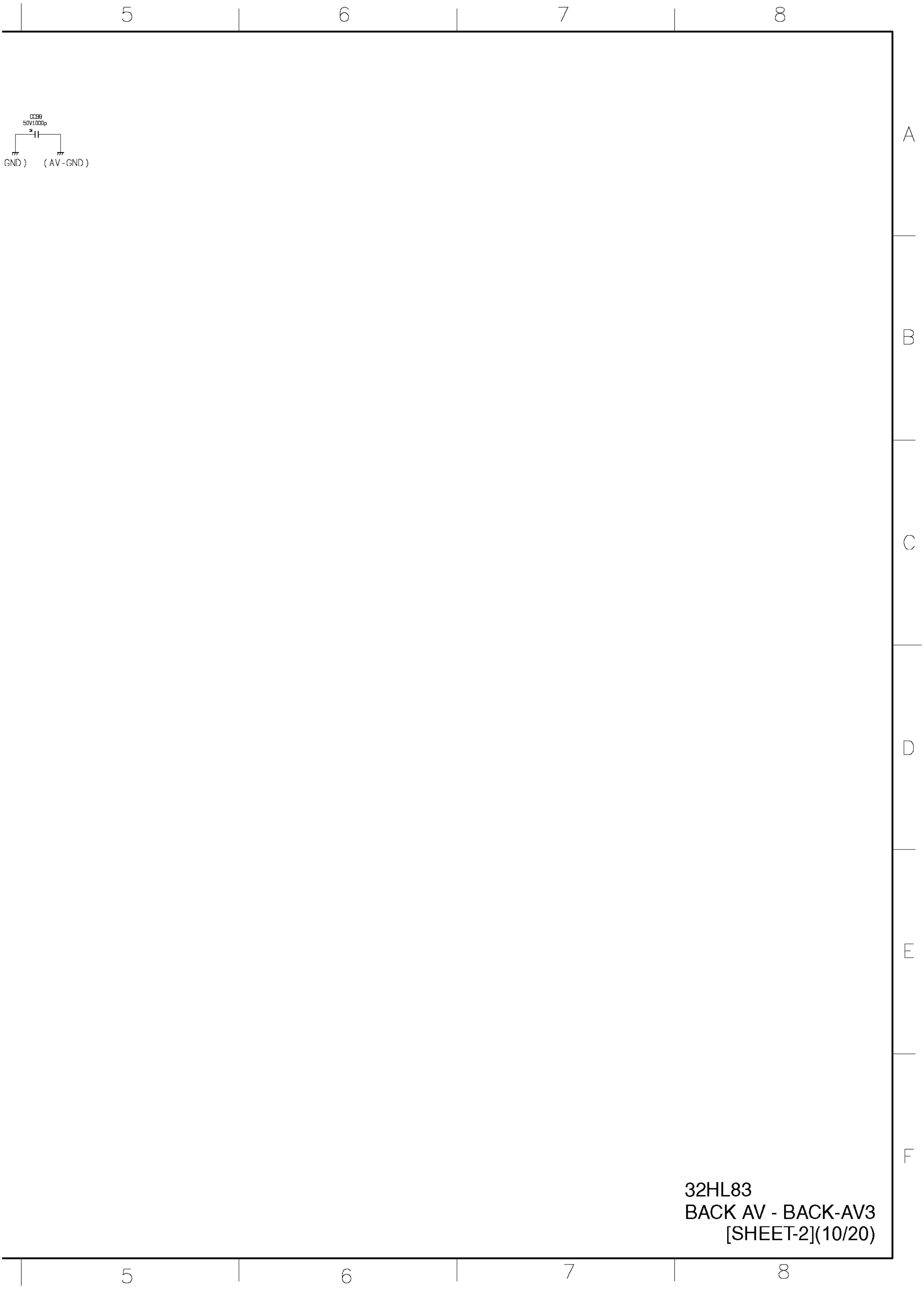
32HL83
BACK AV - BACK-AV1
[SHEET-1](9/20)



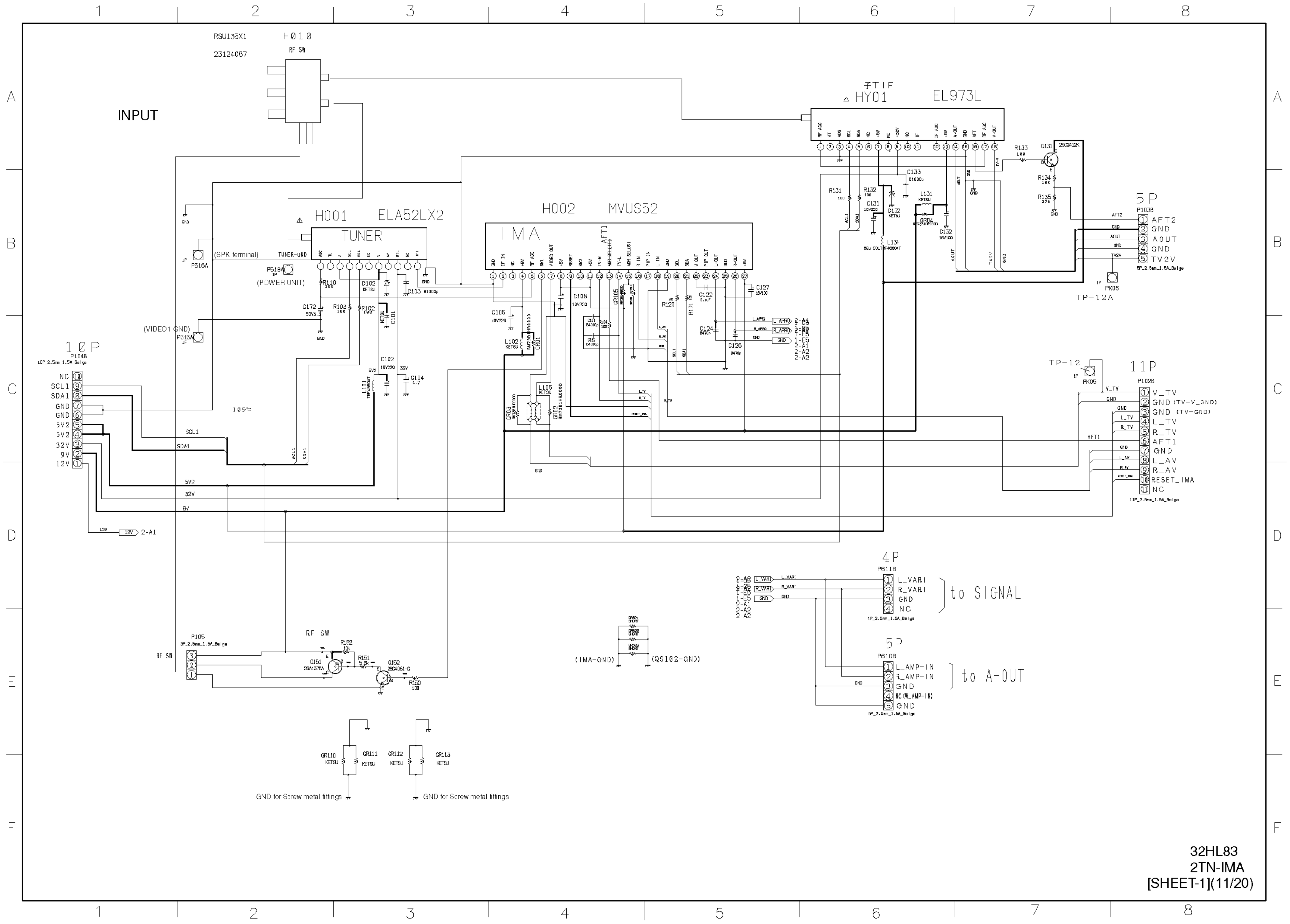
PV11B
1-B6
RI_OUT
GND
(RI-GND)
NC
(AV-GND)
5V_AV
NC
R_HDMI-DVI2
L_HDMI-DVI2
R_HDMI-DVI1
L_HDMI-DVI1
R_HDMI-m
L_HDMI-m
W-B PHD 20P PLUG TOP
50V1000p
(RI-GND)
(AV-GND)
PV12B
R_VARIOUT
L_VARIOUT
R_MONI
L_MONI
V_MONI
R_E5
L_E5
CR_E5
CB_E5
GND_E5
Y_E5
R_E4
L_E4
1-D6
W-B PHD 22P PLUG TOP
PV13B
GND_E4
CR_E4
CB_E4
Y_E4
R_E2
L_E2
GND_E2
V_E2
SSW_E2
SC_E2
SY_E2
1-C6
1-B4
W-B PHD 18P PLUG TOP
PV10B
R_E1
L_E1
GND_E1
V_E1
SSW_E1
SC_E1
SY_E1
1-A4
P515B
INSERT-PIN
For lightning
to TUNER
W-B PHD 10P PLUG TOP

32HL83
BACK AV - BACK-AV3
[SHEET-2](10/20)

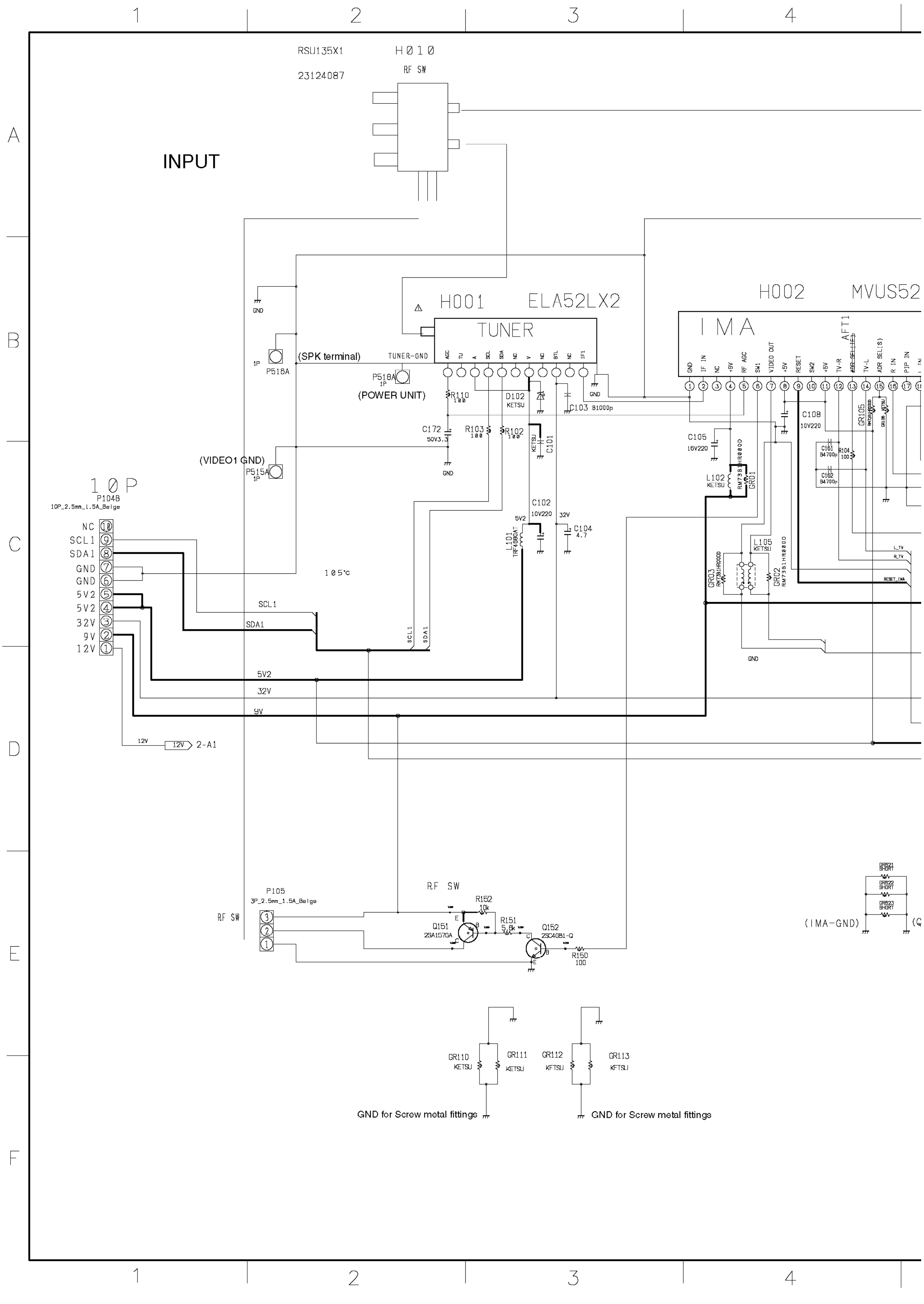

1
2
3
4
A
B
C
D
E
F
PV11B
1-B6
RI_OUT
RI_OUT
GND
GND
(RI-GND)
NC
GND
GND
(RI-GND)
(AV-GND)
GND
GND
9V_AV
9V_AV
NC
GND
GND
(AV-GND)
NC
GND
GND
R_HDMI-DVI2
R_HDMI-DVI2
L_HDMI-DVI2
L_HDMI-DVI2
GND
GND
R_HDMI-DVI1
R_HDMI-DVI1
L_HDMI-DVI1
L_HDMI-DVI1
GND
GND
R_HDMI-m
R_HDMI-m
L_HDMI-m
L_HDMI-m
GND
GND
NC
W-B PHD 20P PLUG TOP
CC9
50V100
(RI-GND)
PV12B
GND
GND
R_VARIOUT
R_VARIOUT
L_VARIOUT
L_VARIOUT
GND
GND
GND
GND
R_MONI
R_MONI
L_MONI
L_MONI
GND
GND
V_MONI
V_MONI
GND
GND
R_E5
R_E5
L_E5
L_E5
GND
GND
CR_E5
CR_E5
1-D6
GND_E5
GND_E5
CB_E5
CB_E5
1-D6
NC
GND
GND
1-D6
Y_E5
Y_E5
GND_E5
GND_E5
R_E4
R_E4
L_E4
L_E4
W-B PHD 22P PLUG TOP
PV13B
GND_E4
GND_E4
CR_E4
CR_E4
1-C6
GND
GND
CB_E4
CB_E4
1-C6
NC
GND
GND
1-C6
Y_E4
Y_E4
GND_E4
GND_E4
R_E2
R_E2
L_E2
L_E2
GND_E2
GND_E2
V_E2
V_E2
1-B4
SSW_E2
SSW_E2
GND
GND
1-B4
SC_E2
SC_E2
GND
GND
SY_E2
SY_E2
GND_E2
GND_E2
W-B PHD 18P PLUG TOP
PV10B
R_E1
R_E1
L_E1
L_E1
GND_E1
GND_E1
V_E1
V_E1
For lightning
to TUNER
P515B
INSERT-PIN
GND
GND
SSW_E1
SSW_E1
1-A4
GND
GND
SC_E1
SC_E1
1-A4
GND_E1
GND_E1
SY_E1
SY_E1
W-B PHD 10P PLUG TOP

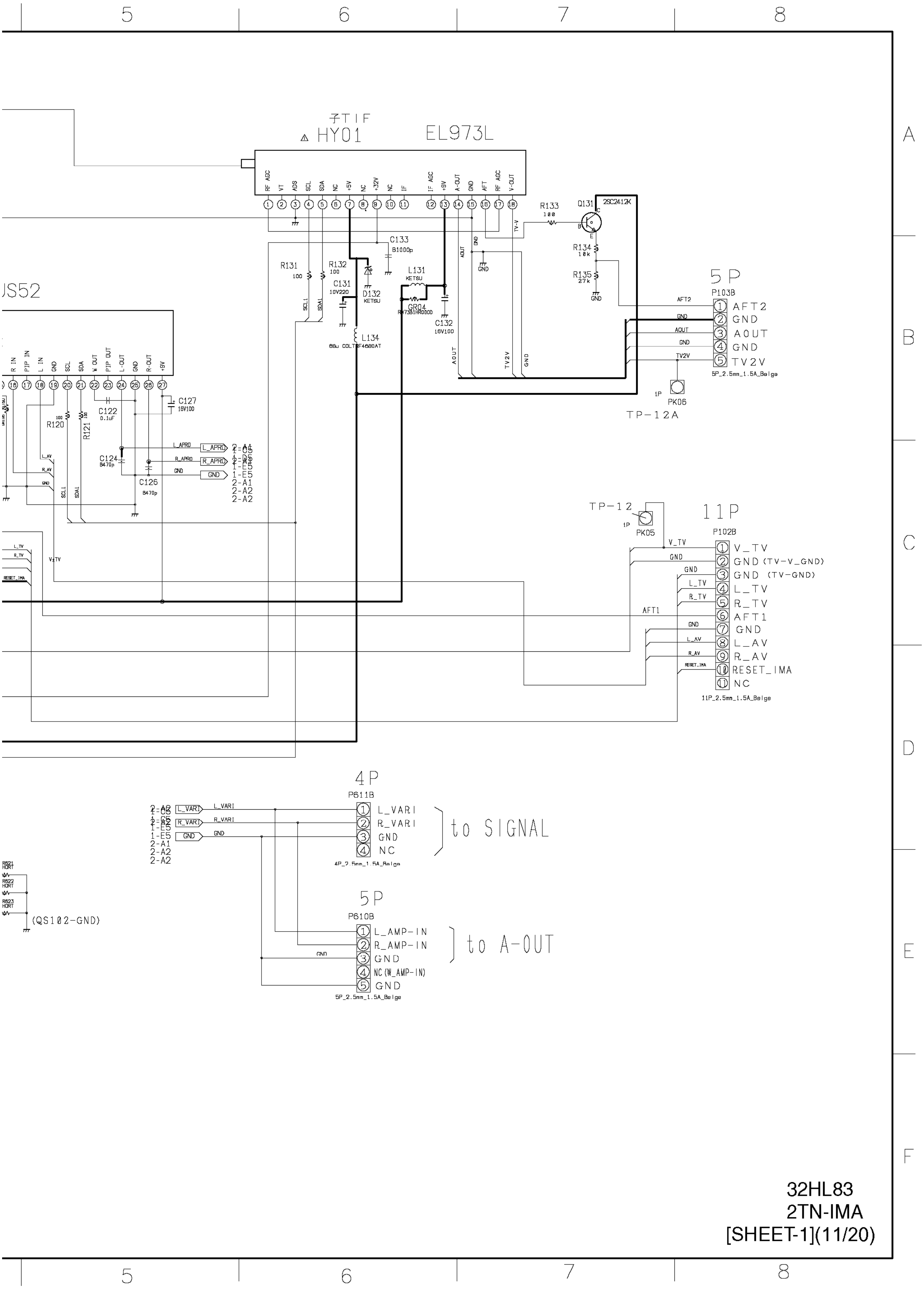

5
6
7
8
A
B
C
D
E
F
CC99
50V1000p
GND)
(AV-GND)
5
6
7
8

32HL83
BACK AV - BACK-AV3
[SHEET-2](10/20)

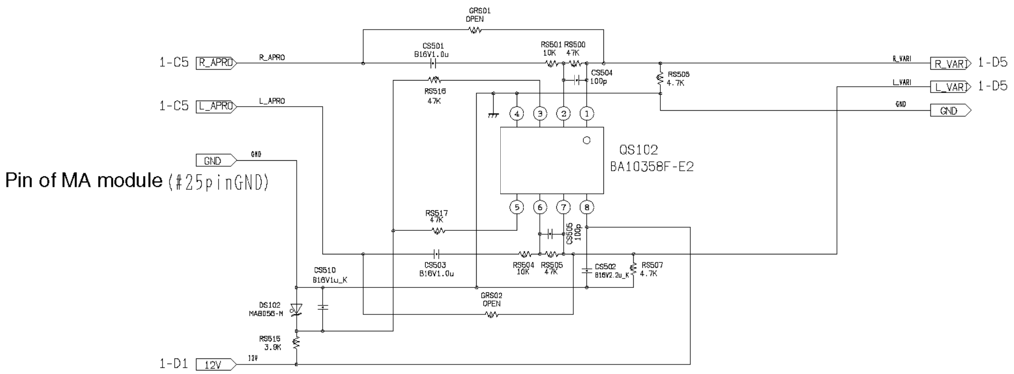

INPUT
RSU135X1
23124087
H010
RF SW
H001 ELA52LX2
TUNER
H002 MVUS52
IMA
AFT1
HY01 EL973L
TIF
10P
P104B
NC
SCL1
SDA1
GND
GND
5V2
5V2
32V
9V
12V
10P_2.5mm_1.5A_Belge
SCL1
SDA1
5V2
32V
9V
12V
2-A1
105°C
(SPK terminal)
P516A
TUNER-GND
P518A
(POWER UNIT)
(VIDEO1 GND)
P515A
R110
R103
R102
D102
C101
C102
C103
C104
C172
L101
C105
C108
L102
L105
GR01
GR02
GR03
GR05
C121
C122
C123
C124
C126
C127
R120
R121
R131
R132
R133
R134
R135
C131
C132
C133
D132
L131
L134
GR04
Q131
2SC2412K
5P
P103B
AFT2
GND
AOUT
GND
TV2V
5P_2.5mm_1.5A_Belge
PK06
TP-12A
TP-12
PK05
11P
P102B
V_TV
GND (TV-V_GND)
GND (TV-GND)
L_TV
R_TV
AFT1
GND
L_AV
R_AV
RESET_IMA
NC
11P_2.5mm_1.5A_Belge
L_APRO
R_APRO
GND
4P
P611B
L_VARI
R_VARI
GND
NC
4P_2.5mm_1.5A_Belge
to SIGNAL
5P
P610B
L_AMP-IN
R_AMP-IN
GND
NC (W_AMP-IN)
GND
5P_2.5mm_1.5A_Belge
to A-OUT
(IMA-GND)
(QS102-GND)
P105
3P_2.5mm_1.5A_Belge
RF SW
Q151
2SA1576A
Q152
2SC4081-Q
R150
R151
R152
GR110
GR111
GR112
GR113
KETSU
GND for Screw metal fittings
GND for Screw metal fittings
1 2 3 4 5 6 7 8
A B C D E F

32HL83
2TN-IMA
[SHEET-1](11/20)

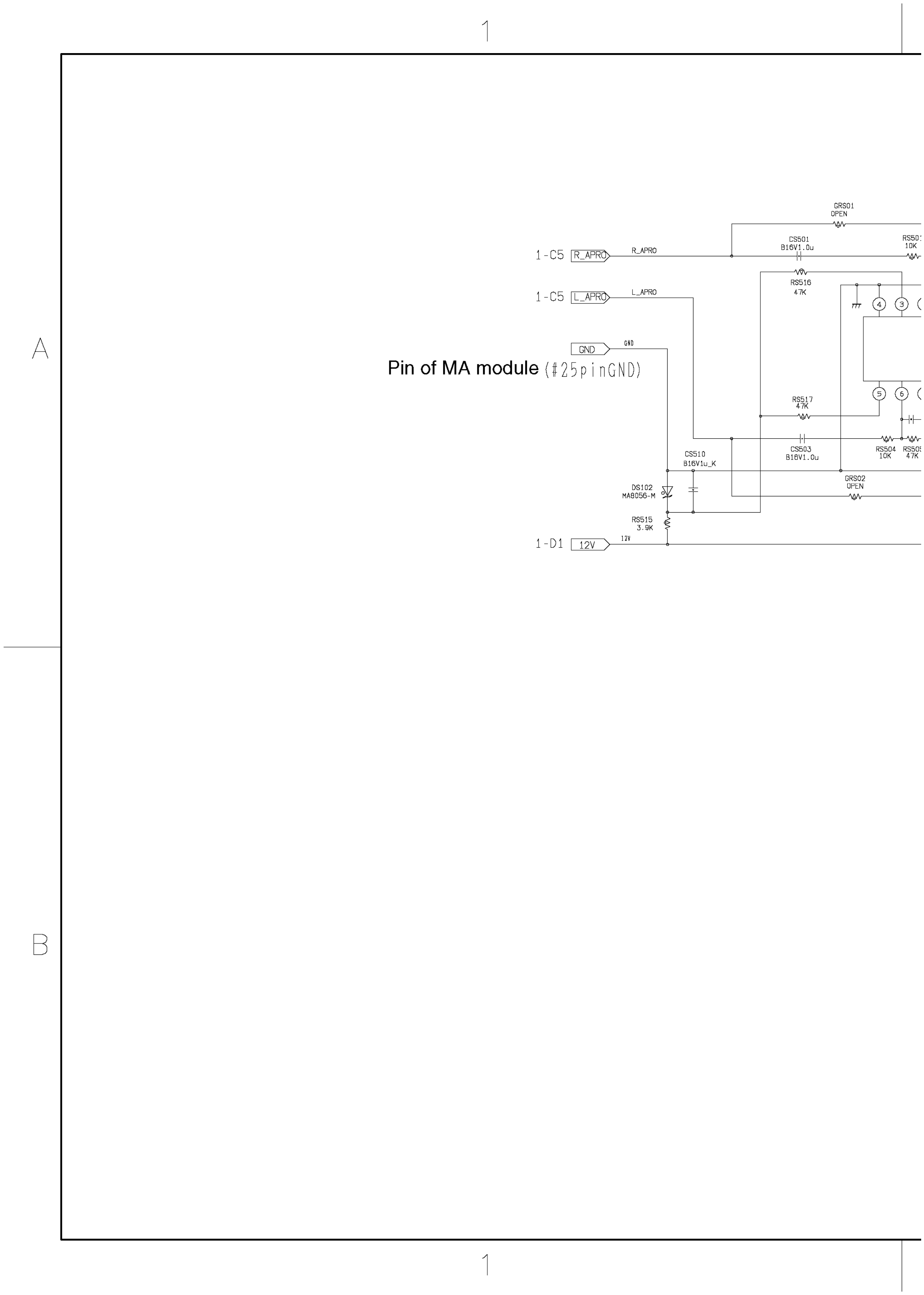

1
2
3
4
A
B
C
D
E
F
INPUT
RSU135X1
23124087
H010
RF SW
H001
ELA52LX2
TUNER
AGC
TU
A
SCL
SDA
NC
V
NC
BTL
NC
IF1
TUNER-GND
GND
1P
P516A
(SPK terminal)
P518A
1P
(POWER UNIT)
R110
100
D102
KETSU
C103 B1000p
C172
50V3.3
R103
100
R102
100
KETSU
C101
(VIDEO1 GND)
P515A
1P
10P
P104B
10P_2.5mm_1.5A_Beige
NC
SCL1
SDA1
GND
GND
5V2
5V2
32V
9V
12V
105℃
C102
10V220
5V2
32V
C104
4.7
L101
TRF4680AT
SCL1
SDA1
SCL1
SDA1
5V2
32V
9V
12V
12V
2-A1
H002
MVUS52
IMA
AFT1
GND
IF IN
NC
+9V
RF AGC
SW1
VIDEO OUT
+5V
RESET
SW2
+5V
TV-R
ADR SEL(IF)
TV-L
ADR SEL(S)
R IN
PIP IN
C105
16V220
C108
10V220
GR105
C161
B4700p
R104
100
C162
B4700p
L102
KETSU
RM73B1HR000D
GR01
L105
KETSU
GR03
RM73B1HR000D
GR02
RM73B1HR000D
L_TV
R_TV
RESET_IMA
GND
P105
3P_2.5mm_1.5A_Beige
RF SW
RF SW
R152
10k
Q151
2SA1576A
R151
5.6k
Q152
2SC4081-Q
R150
100
GR821
SHORT
GR822
SHORT
GR823
SHORT
(IMA-GND)
GR110
KETSU
GR111
KETSU
GR112
KETSU
GR113
KETSU
GND for Screw metal fittings
GND for Screw metal fittings


5
6
7
8
A
B
C
D
E
F
子TIF
HY01
EL973L
RF AGC
VT
ADS
SCL
SDA
NC
+5V
NC
+32V
NC
IF
IF AGC
+9V
A-OUT
GND
AFT
RF AGC
V-OUT
R133
100
Q131
2SC2412K
C
B
E
TV-V
R134
10k
R135
27k
GND
C133
B1000p
R131
100
R132
100
C131
10V220
D132
KETSU
L131
KETSU
GR04
RM73B1HR000D
C132
16V100
L134
68u COLTRF4680AT
SCL1
SDA1
AOUT
GND
TV2V
5P
P103B
AFT2
GND
AOUT
GND
TV2V
① AFT2
② GND
③ AOUT
④ GND
⑤ TV2V
5P_2.5mm_1.5A_Beige
1P
PK06
TP-12A
US52
R IN
PIP IN
L IN
GND
SCL
SDA
W OUT
PIP OUT
L-OUT
GND
R-OUT
+9V
C127
16V100
C122
0.1uF
R120
100
R121
100
C124
B470p
C126
B470p
L_APRO
R_APRO
GND
L_AV
R_AV
GND
2-A1
1-C5
1-D5
2-A1
1-E5
1-E5
2-A1
2-A2
2-A2
L_TV
R_TV
V_TV
RESET_IMA
TP-12
1P
PK05
11P
P102B
V_TV
GND
GND
L_TV
R_TV
AFT1
GND
L_AV
R_AV
RESET_IMA
① V_TV
② GND (TV-V_GND)
③ GND (TV-GND)
④ L_TV
⑤ R_TV
⑥ AFT1
⑦ GND
⑧ L_AV
⑨ R_AV
⑩ RESET_IMA
⑪ NC
11P_2.5mm_1.5A_Beige
4P
P611B
L_VARI
R_VARI
GND
① L_VARI
② R_VARI
③ GND
④ NC
4P_2.5mm_1.5A_Beige
to SIGNAL
2-A2
1-C5
2-A2
1-D5
1-E5
1-E5
2-A1
2-A2
2-A2
R621
HORT
R622
HORT
R623
HORT
(QS102-GND)
5P
P610B
① L_AMP-IN
② R_AMP-IN
③ GND
④ NC(W_AMP-IN)
⑤ GND
5P_2.5mm_1.5A_Beige
to A-OUT

32HL83
2TN-IMA
[SHEET-1](11/20)

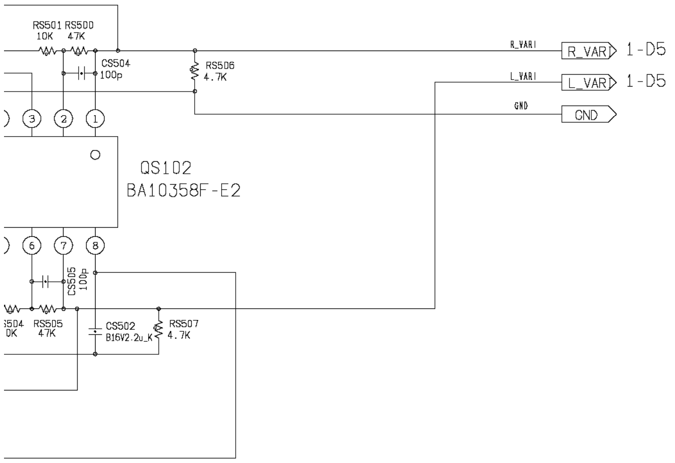

1-C5
R_APRO
1-C5
L_APRO
GND
Pin of MA module (#25pinGND)
1-D1
12V
GRS01
OPEN
CS501
B16V1.0u
RS501
10K
RS500
47K
CS504
100p
RS506
4.7K
RS516
47K
QS102
BA10358F-E2
1
2
3
4
5
6
7
8
RS517
47K
CS505
100p
CS503
B16V1.0u
RS504
10K
RS505
47K
CS502
B16V2.2u_K
RS507
4.7K
GRS02
OPEN
CS510
B16V1u_K
DS102
MA8056-M
RS515
3.9K
R_VARI
1-D5
L_VARI
1-D5
GND

32HL83
AUDIO GAIN COMPENSATION
[SHEET-2](12/20)



Pin of MA module (#25pinGND)

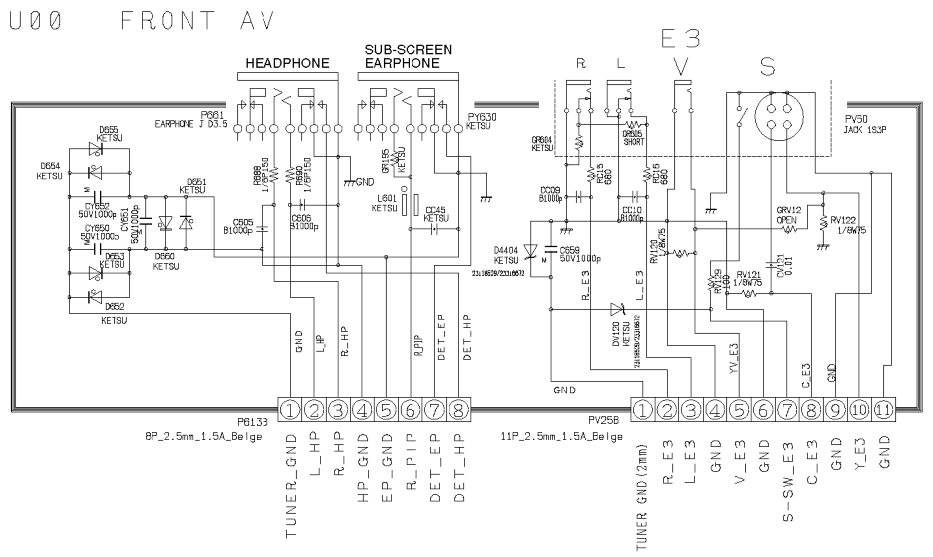
1
A
B
1-C5
R_APRO
R_APRO
1-C5
L_APRO
L_APRO
GND
GND
1-D1
12V
12V
GRS01
OPEN
CS501
B16V1.0u
RS50
10K
RS516
47K
4
3
5
6
RS517
47K
CS503
B16V1.0u
RS504
10K
RS50
47K
CS510
B16V1u_K
GRS02
OPEN
DS102
MA8056-M
RS515
3.9K
1


RS501
10K
RS500
47K
CS504
100p
RS506
4.7K
R_VARI
R_VARI
1-D5
L_VARI
L_VARI
1-D5
GND
GND
3
2
1
QS102
BA10358F-E2
6
7
8
CS505
100p
S504
0K
RS505
47K
CS502
B16V2.2u_K
RS507
4.7K

A

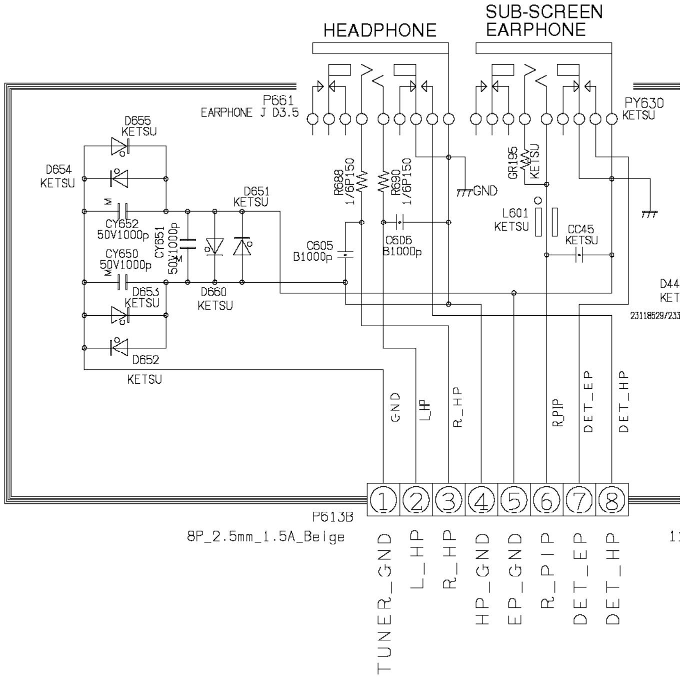
B

32HL83
AUDIO GAIN COMPENSATION
[SHEET-2](12/20)

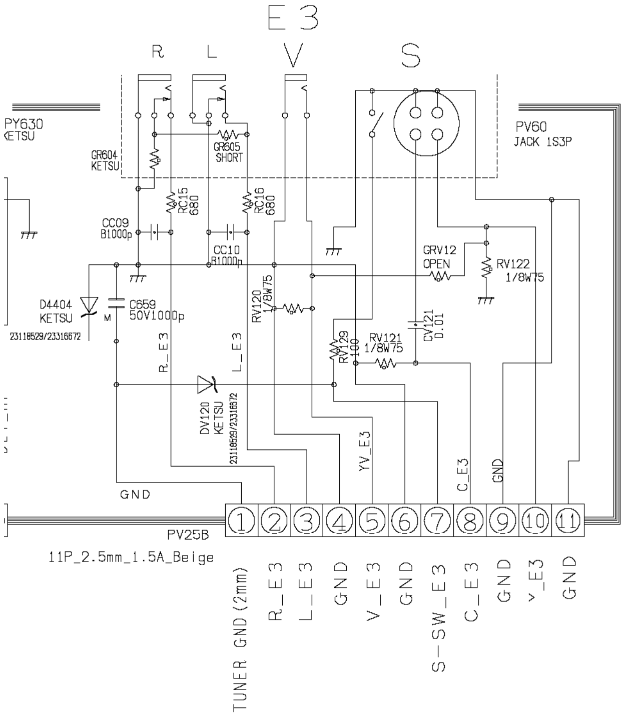

U00 FRONT AV
HEADPHONE
SUB-SCREEN
EARPHONE
P661
EARPHONE J D3.5
PY630
KETSU
D655
KETSU
D654
KETSU
CY652
50V1000p
CY650
50V1000p
CY651
50V1000p
D651
KETSU
D653
KETSU
D660
KETSU
D652
KETSU
R688
1/6P150
R690
1/6P150
C605
B1000p
C606
B1000p
GND
GR195
KETSU
L601
KETSU
CC45
KETSU
GND
L_HP
R_HP
R_PIP
DET_EP
DET_HP
P6133
8P_2.5mm_1.5A_Beige
TUNER_GND
L_HP
R_HP
HP_GND
EP_GND
R_PIP
DET_EP
DET_HP
E3
R
L
V
S
GR604
KETSU
GR605
SHORT
PV50
JACK 1S3P
RC15
680
RC16
680
CC09
B1000p
CC10
B1000p
D4404
KETSU
23118529/23316672
C659
50V1000p
R_E3
L_E3
RV120
1/8W75
GRV12
OPEN
RV122
1/8W75
RV129
100
RV121
1/8W75
CV121
0.01
DV120
KETSU
23118529/23316672
YV_E3
C_E3
GND
GND
PV25B
11P_2.5mm_1.5A_Beige
TUNER GND(2mm)
R_E3
L_E3
GND
V_E3
GND
S-SW_E3
C_E3
GND
Y_E3
GND

32HL83
FRONT AV(13/20)
]

U00 FRONT AV


HEADPHONE
SUB-SCREEN EARPHONE
P661
EARPHONE J D3.5
PY630
KETSU
D655
KETSU
D654
KETSU
M
CY652
50V1000p
CY650
50V1000p
CY651
50V1000p
M
D651
KETSU
D660
KETSU
D653
KETSU
D652
KETSU
R688
1/6P150
R690
1/6P150
GND
C605
B1000p
C606
B1000p
GR195
KETSU
L601
KETSU
CC45
KETSU
D44
KET
23118529/233
GND
L_HP
R_HP
R_PIP
DET_EP
DET_HP
①
②
③
④
⑤
⑥
⑦
⑧
P613B
8P_2.5mm_1.5A_Beige
TUNER_GND
L_HP
R_HP
HP_GND
EP_GND
R_PIP
DET_EP
DET_HP
1

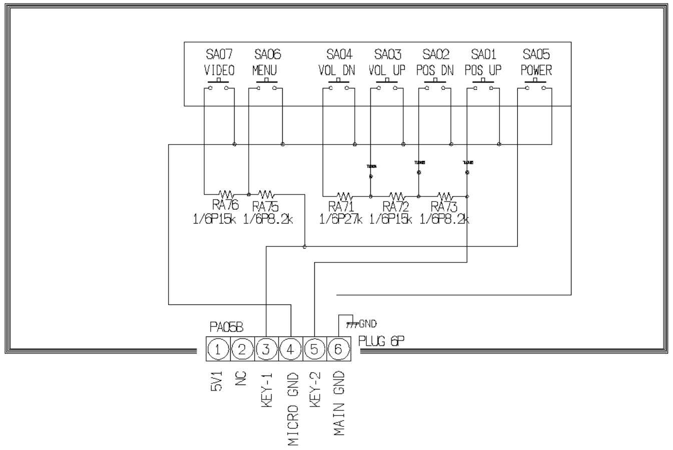
A


E3
R
L
V
S
PY630
KETSU
GR604
KETSU
GR605
SHORT
PV60
JACK 1S3P
RC15
680
RC16
680
CC09
B1000p
CC10
B1000p
GRV12
OPEN
RV122
1/8W75
D4404
KETSU
23118529/23316672
C659
50V1000p
M
RV120
1/8W75
RV129
100
RV121
1/8W75
CV121
0.01
R_E3
L_E3
DV120
KETSU
23118529/23316672
YV_E3
C_E3
GND
GND
PV25B
11P_2.5mm_1.5A_Beige
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
TUNER GND(2mm)
R_E3
L_E3
GND
V_E3
GND
S-SW_E3
C_E3
GND
v_E3
GND

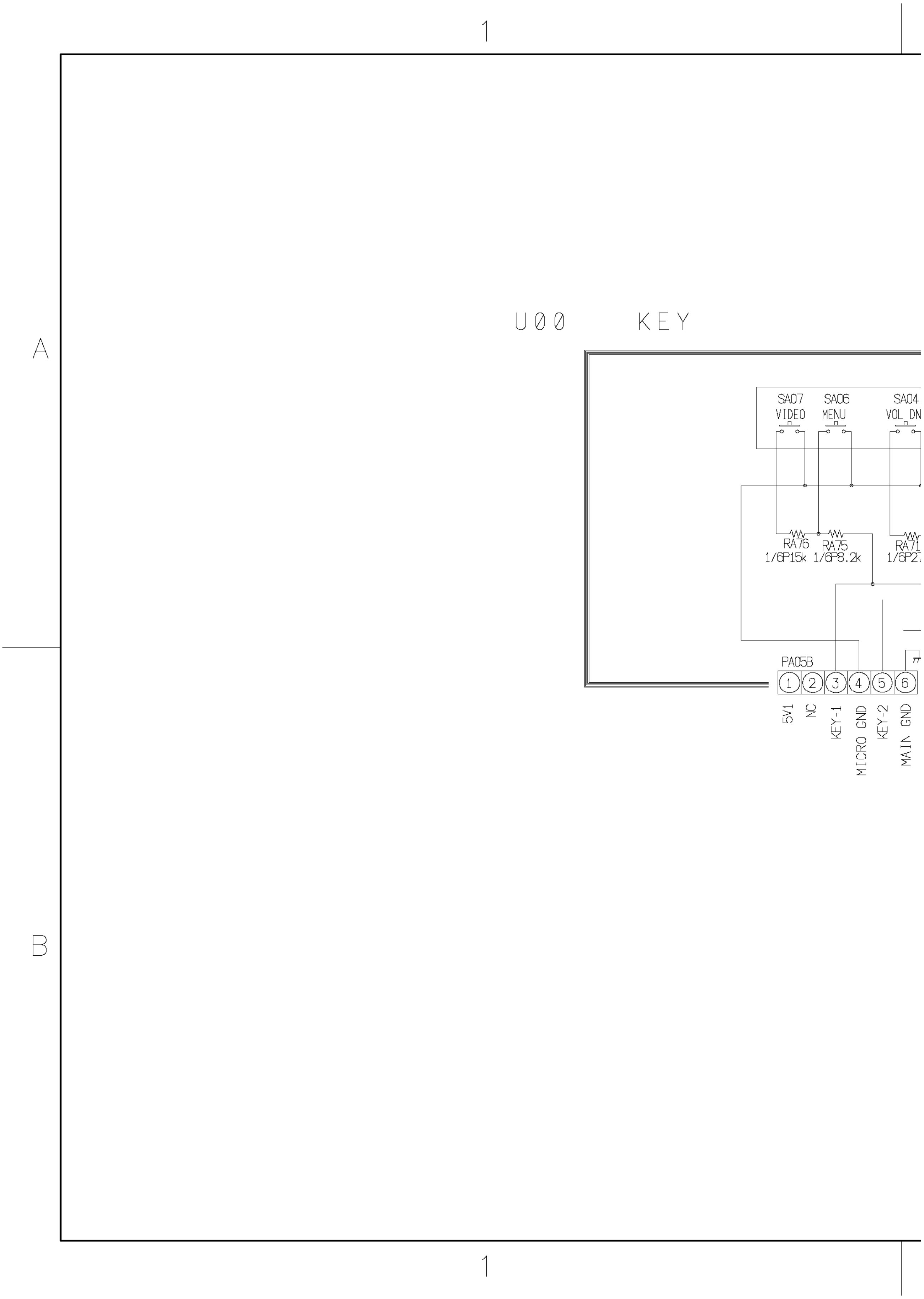
B

32HL83
FRONT AV(13/20)

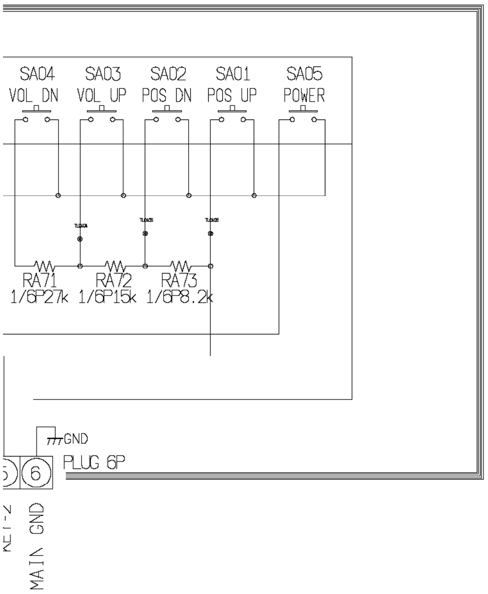
U00 KEY


SA07
VIDEO
SA06
MENU
SA04
VOL DN
SA03
VOL UP
SA02
POS DN
SA01
POS UP
SA05
POWER
RA76
1/6P15k
RA75
1/6P8.2k
RA71
1/6P27k
RA72
1/6P15k
RA73
1/6P8.2k
GND
PA05B
PLUG 6P
1
2
3
4
5
6
5V1
NC
KEY-1
MICRO GND
KEY-2
MAIN GND

32HL83
KEY(14/20)

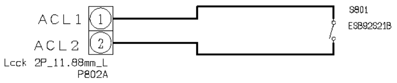

1
A
U00 KEY
SA07
VIDEO
SA06
MENU
SA04
VOL DN
RA76
1/6P15k
RA75
1/6P8.2k
RA71
1/6P27
PA05B
1
2
3
4
5
6
5V1
NC
KEY-1
MICRO GND
KEY-2
MAIN GND
B
1

A

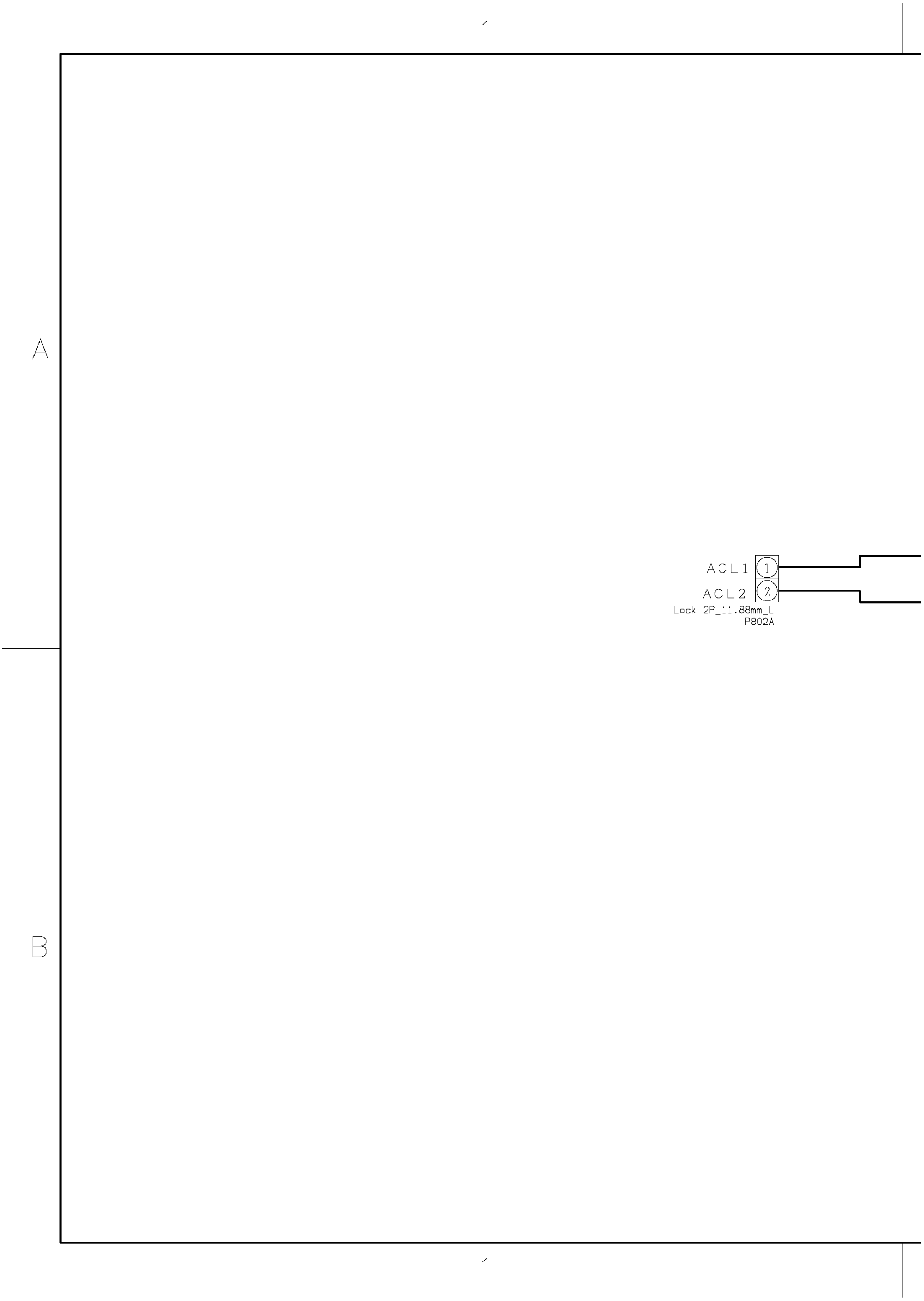

SA04
VOL DN
SA03
VOL UP
SA02
POS DN
SA01
POS UP
SA05
POWER
RA71
1/6P27k
RA72
1/6P15k
RA73
1/6P8.2k
GND
PLUG 6P
6
MAIN GND

B

32HL83
KEY(14/20)

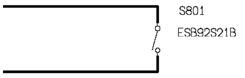

ACL1
ACL2
1
2
Lcck 2P_11.88mm_L
P802A
S801
ESB92S21B

32HL83
POWER SW(15/20)


1
A
ACL1
ACL2
Lock 2P_11.88mm_L
P802A
B
1

2

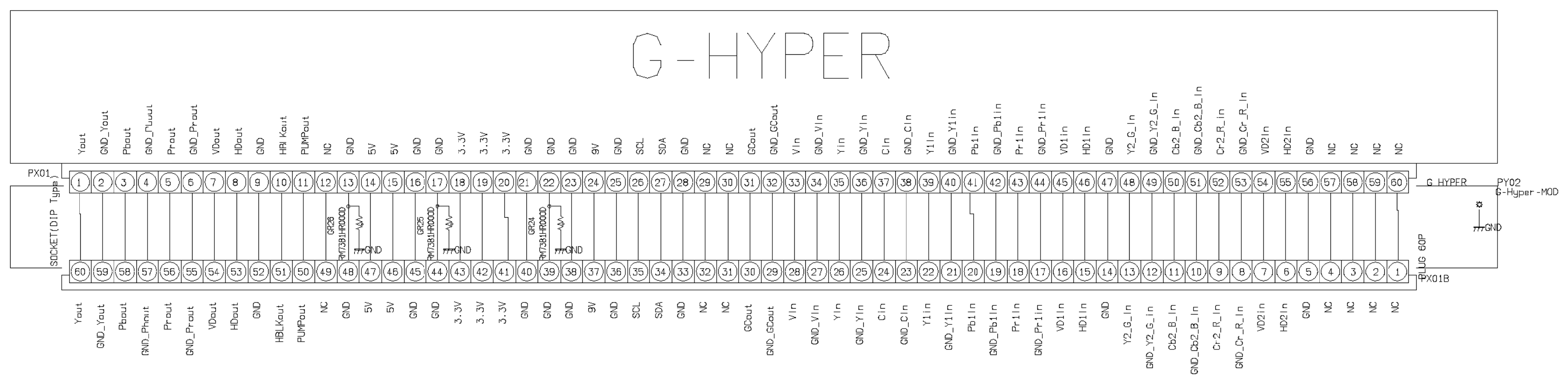
A


S801
ESB92S21B

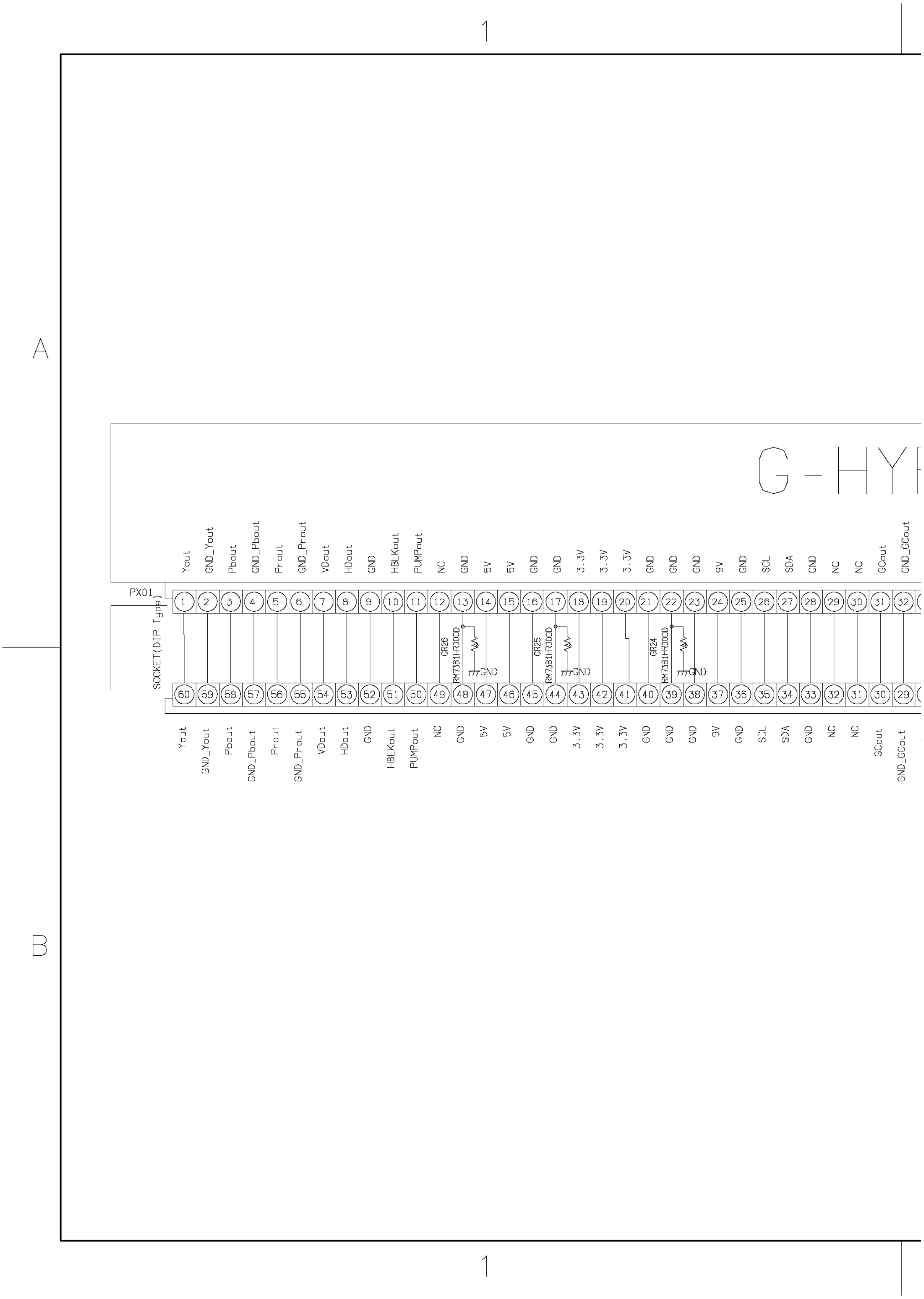
B

32HL83
POWER SW(15/20)

2


G-HYPER
PX01
SOCKET(DIP Type)
G_HYPER
PY02
G-Hyper-MOD
GND
PLUG 60P
PX01B
1 Yout
2 GND_Yout
3 Pbout
4 GND_Pbout
5 Prout
6 GND_Prout
7 VDout
8 HDout
9 GND
10 HRI Kout
11 PUMPout
12 NC
13 GND
14 5V
15 5V
16 GND
17 GND
18 3.3V
19 3.3V
20 3.3V
21 GND
22 GND
23 GND
24 9V
25 GND
26 SCL
27 SDA
28 GND
29 NC
30 NC
31 GCout
32 GND_GCout
33 VIn
34 GND_VIn
35 YIn
36 GND_YIn
37 CIn
38 GND_CIn
39 Y1In
40 GND_Y1In
41 Pb1In
42 GND_Pb1In
43 Pr1In
44 GND_Pr1In
45 VD1In
46 HD1In
47 GND
48 Y2_G_In
49 GND_Y2_G_In
50 Cb2_B_In
51 GND_Cb2_B_In
52 Cr2_R_In
53 GND_Cr_R_In
54 VD2In
55 HD2In
56 GND
57 NC
58 NC
59 NC
60 NC
GR26
RM73B1HR000D
GND
GR25
RM73B1HR000D
GND
GR24
RM73B1HR000D
GND
60 Yout
59 GND_Yout
58 Pbout
57 GND_Pbout
56 Prout
55 GND_Prout
54 VDout
53 HDout
52 GND
51 HBLKout
50 PUMPout
49 NC
48 GND
47 5V
46 5V
45 GND
44 GND
43 3.3V
42 3.3V
41 3.3V
40 GND
39 GND
38 GND
37 9V
36 GND
35 SCL
34 SDA
33 GND
32 NC
31 NC
30 GCout
29 GND_GCout
28 VIn
27 GND_VIn
26 YIn
25 GND_YIn
24 CIn
23 GND_CIn
22 Y1In
21 GND_Y1In
20 Pb1In
19 GND_Pb1In
18 Pr1In
17 GND_Pr1In
16 VD1In
15 HD1In
14 GND
13 Y2_G_In
12 GND_Y2_G_In
11 Cb2_B_In
10 GND_Cb2_B_In
9 Cr2_R_In
8 GND_Cr_R_In
7 VD2In
6 HD2In
5 GND
4 NC
3 NC
2 NC
1 NC

32HL83
G-HYPER(16/20)


1
A
B
G-HY
PX01
SOCKET(DIP Type)
Yout
GND_Yout
Pbout
GND_Pbout
Prout
GND_Prout
VDout
HDout
GND
HBLKout
PUMPout
NC
GND
5V
5V
GND
GND
3.3V
3.3V
3.3V
GND
GND
GND
9V
GND
SCL
SDA
GND
NC
NC
GCout
GND_GCout
GR26
RM73B1HRJ00D
GND
GR25
RM73B1HRJ00D
GND
GR24
RM73B1HRJ00D
GND
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
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28
29
30
31
32
60
59
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56
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53
52
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49
48
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41
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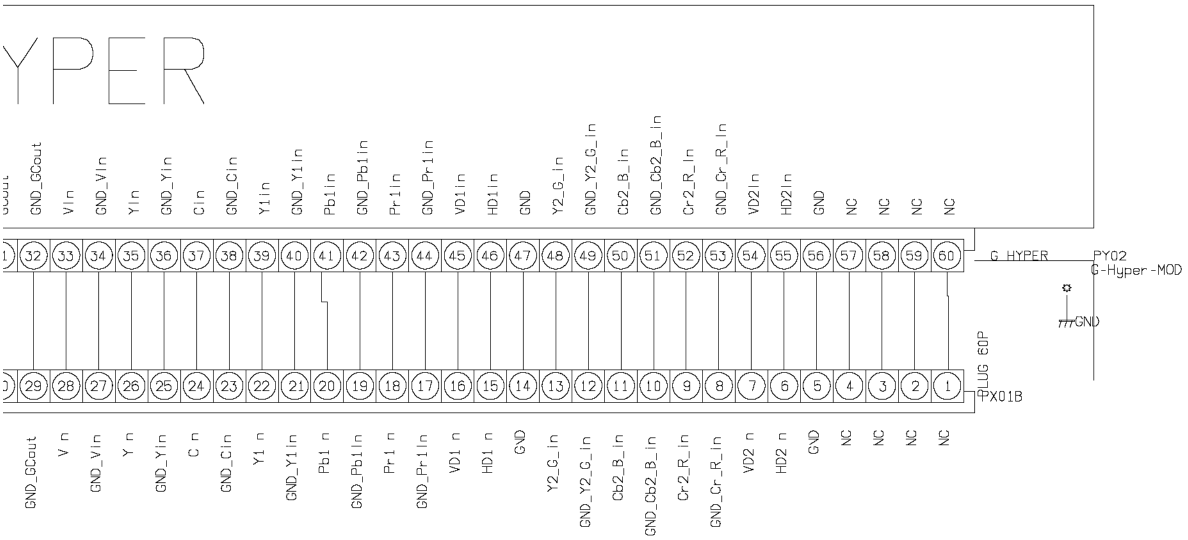
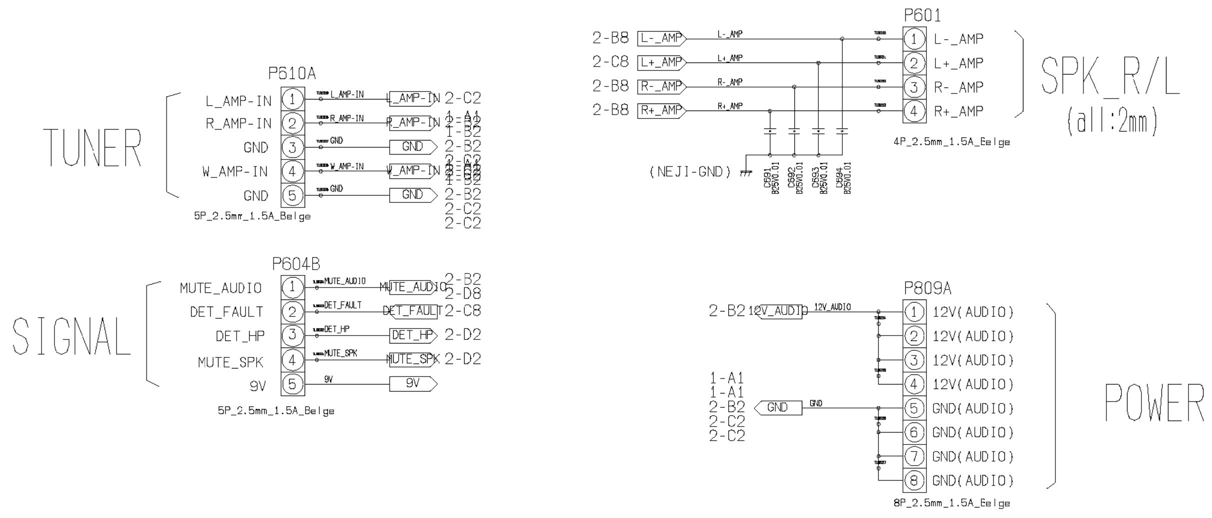
39
38
37
36
35
34
33
32
31
30
29
1

A

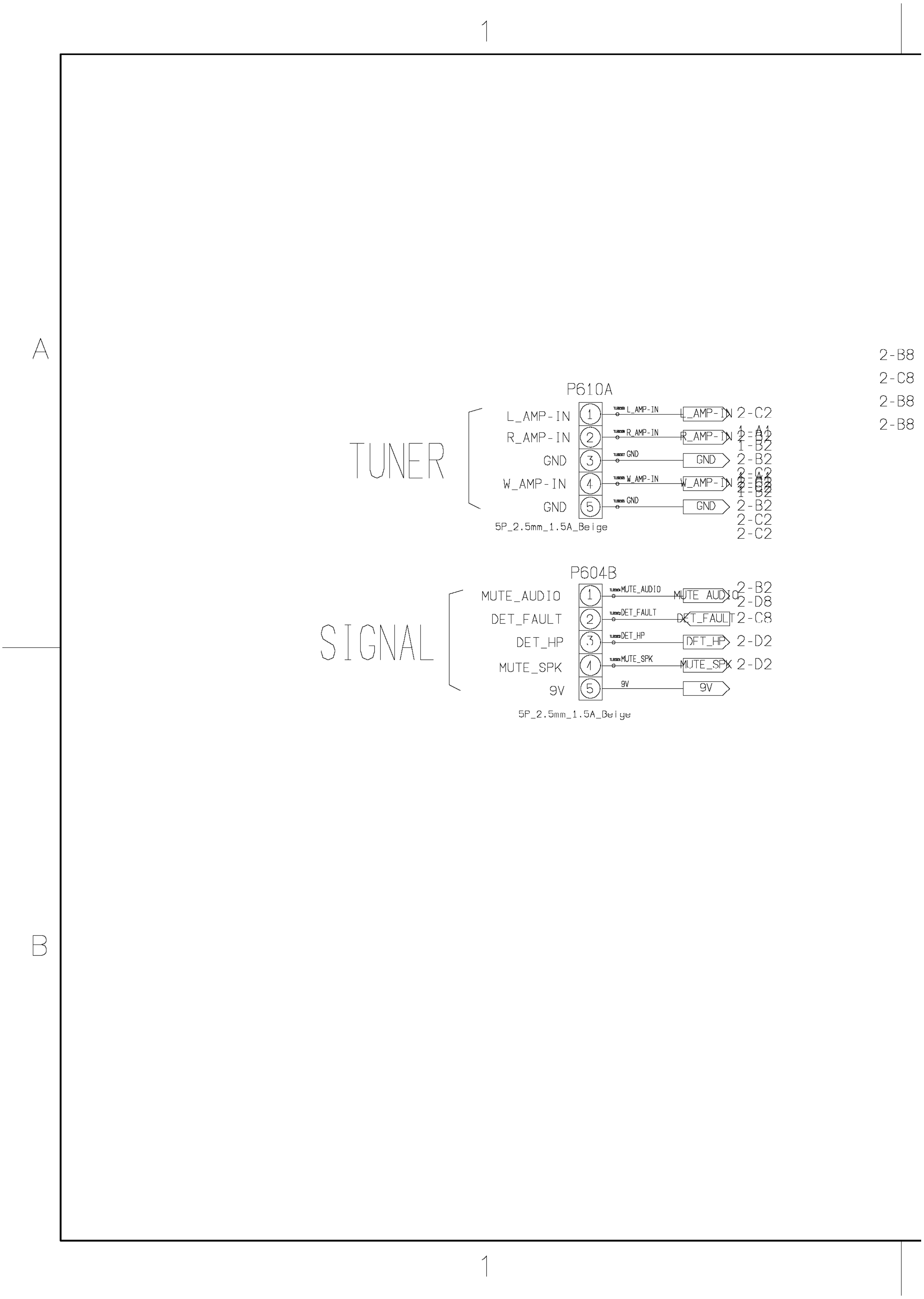

YPER
GND_GCout
VIn
GND_VIn
YIn
GND_YIn
CIn
GND_CIn
Y1In
GND_Y1In
Pb1In
GND_Pb1In
Pr1In
GND_Pr1In
VD1In
HD1In
GND
Y2_G_In
GND_Y2_G_In
Cb2_B_In
GND_Cb2_B_In
Cr2_R_In
GND_Cr_R_In
VD2In
HD2In
GND
NC
NC
NC
NC
32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60
G HYPER
PY02
G-Hyper-MOD
GND
PLUG 60P
PX01B
29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
GND_GCout
V n
GND_VIn
Y n
GND_YIn
C n
GND_CIn
Y1 n
GND_Y1In
Pb1 n
GND_Pb1In
Pr1 n
GND_Pr1In
VD1 n
HD1 n
GND
Y2_G_In
GND_Y2_G_In
Cb2_B_In
GND_Cb2_B_In
Cr2_R_In
GND_Cr_R_In
VD2 n
HD2 n
GND
NC
NC
NC
NC

B

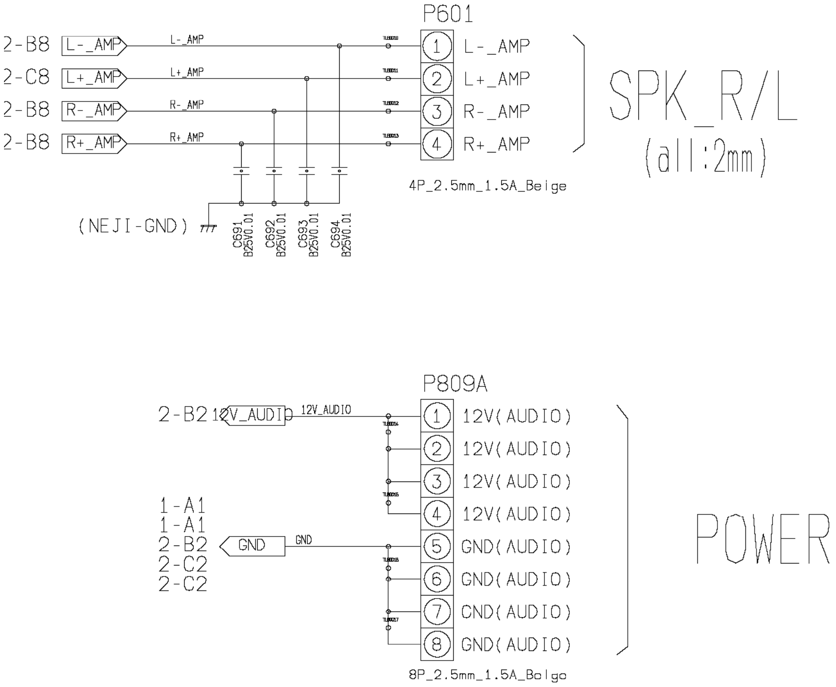
32HL83
G-HYPER(16/20)


TUNER
P610A
L_AMP-IN
R_AMP-IN
GND
W_AMP-IN
GND
5P_2.5mm_1.5A_Beige
2-C2
1-B2
2-B2
2-C2
2-C2
SIGNAL
P604B
MUTE_AUDIO
DET_FAULT
DET_HP
MUTE_SPK
9V
5P_2.5mm_1.5A_Beige
2-B2
2-D8
2-C8
2-D2
2-D2
SPK_R/L
(all:2mm)
P601
L-_AMP
L+_AMP
R-_AMP
R+_AMP
4P_2.5mm_1.5A_Beige
2-B8
2-C8
2-B8
2-B8
(NEJI-GND)
C691 B25V0.01
C692 B25V0.01
C693 B25V0.01
C694 B25V0.01
POWER
P809A
12V(AUDIO)
12V(AUDIO)
12V(AUDIO)
12V(AUDIO)
GND(AUDIO)
GND(AUDIO)
GND(AUDIO)
GND(AUDIO)
8P_2.5mm_1.5A_Beige
2-B2
12V_AUDIO
GND
1-A1
1-A1
2-B2
2-C2
2-C2

32HL83
A-OUT - (1/2)
[SHEET-1/2](17/20)

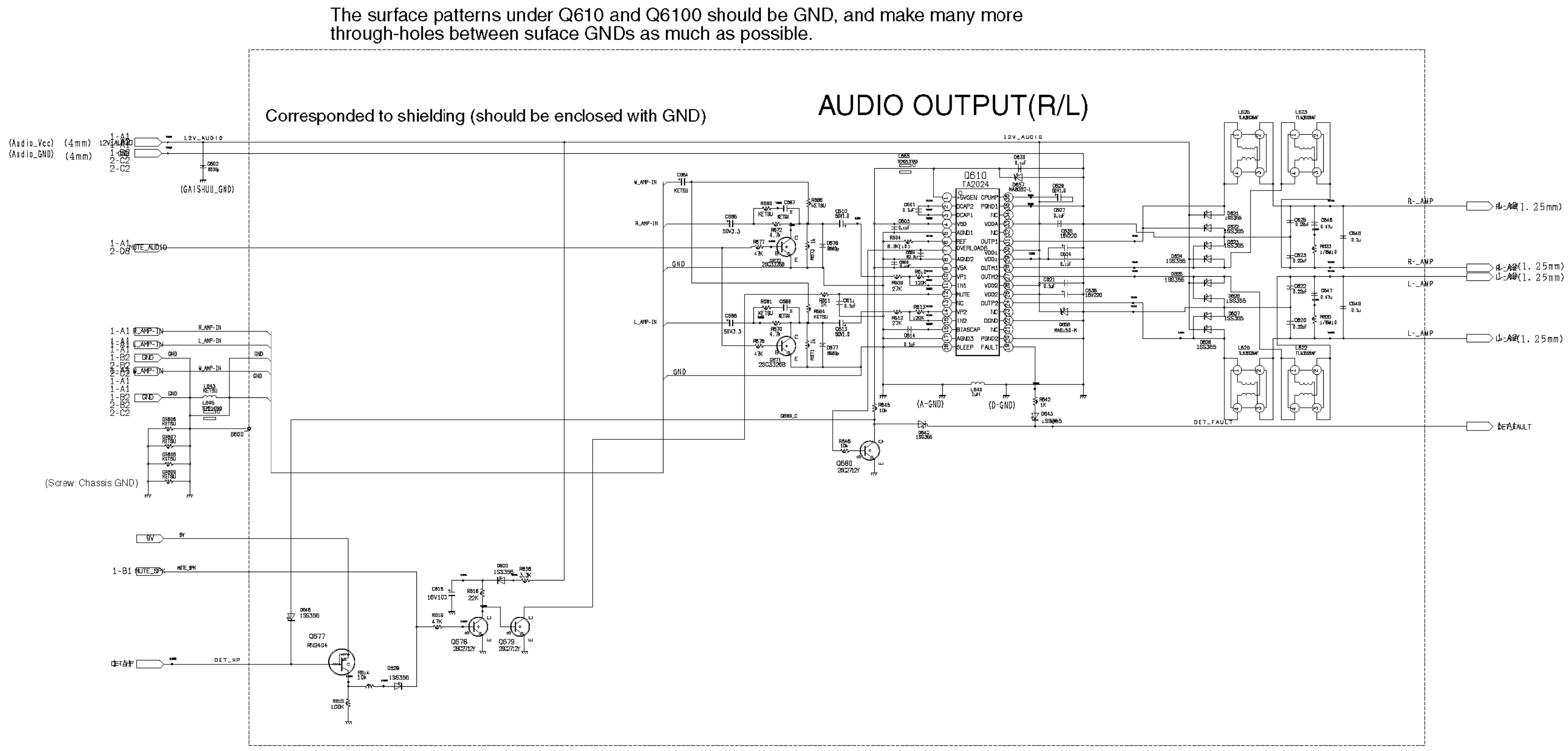

1
A
B
1
2-B8
2-C8
2-B8
2-B8
P610A
TUNER
L_AMP-IN
R_AMP-IN
GND
W_AMP-IN
GND
1
2
3
4
5
L_AMP-IN
R_AMP-IN
GND
W_AMP-IN
GND
L_AMP-IN
R_AMP-IN
GND
W_AMP-IN
GND
2-C2
1-A1
1-B2
2-B2
2-C2
2-B2
2-C2
2-C2
5P_2.5mm_1.5A_Beige
P604B
SIGNAL
MUTE_AUDIO
DET_FAULT
DET_HP
MUTE_SPK
9V
1
2
3
4
5
MUTE_AUDIO
DET_FAULT
DET_HP
MUTE_SPK
9V
MUTE_AUDIO
DET_FAULT
DET_HP
MUTE_SPK
9V
2-B2
2-D8
2-C8
2-D2
2-D2
5P_2.5mm_1.5A_Beige

A


P601
2-B8 L-_AMP
2-C8 L+_AMP
2-B8 R-_AMP
2-B8 R+_AMP
L-_AMP
L+_AMP
R-_AMP
R+_AMP
① L-_AMP
② L+_AMP
③ R-_AMP
④ R+_AMP
SPK_R/L
(all:2mm)
4P_2.5mm_1.5A_Beige
(NEJI-GND)
C691 B25V0.01
C692 B25V0.01
C693 B25V0.01
C694 B25V0.01
P809A
2-B2 12V_AUDIO
12V_AUDIO
① 12V(AUDIO)
② 12V(AUDIO)
③ 12V(AUDIO)
④ 12V(AUDIO)
1-A1
1-A1
2-B2
2-C2
2-C2
GND
GND
⑤ GND(AUDIO)
⑥ GND(AUDIO)
⑦ CND(AUDIO)
⑧ GND(AUDIO)
POWER
8P_2.5mm_1.5A_Bolgo

B

32HL83
A-OUT - (1/2)
[SHEET-1/2](17/20)

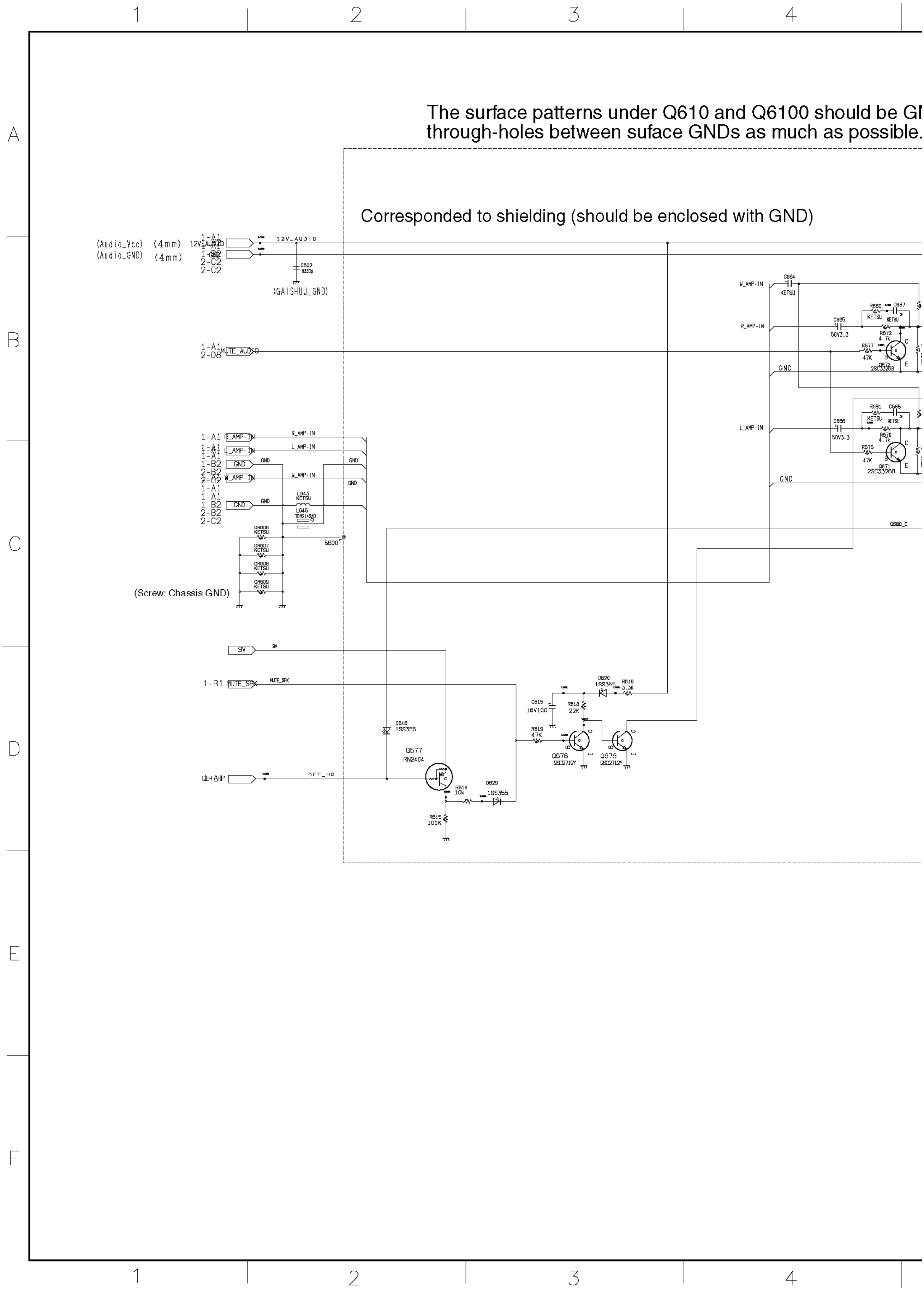

The surface patterns under Q610 and Q6100 should be GND, and make many more through-holes between suface GNDs as much as possible.

Corresponded to shielding (should be enclosed with GND)

AUDIO OUTPUT(R/L)

(Audio_Vcc) (4mm)
(Audio_GND) (4mm)
12V_AUDIO
GND
1-A1
2-C2
C602
(GAISHUU_GND)
1-A1
2-D8
MUTE_AUDIO
R_AMP-IN
L_AMP-IN
W_AMP-IN
GND
1-B2
2-B2
L843
KETSU
L845
TEM2142AD
GF606
GF607
GF608
GF609
KETSU
B600
(Screw: Chassis GND)
9V
1-B1
MUTE_SPK
DET_HP
Q577
D618
1SS356
R614
10k
R615
100K
D629
1SS356
C615
16V100
R618
4.7K
R616
22K
D630
R636
3.3K
Q578
2SC2712Y
Q579
2SC2712Y
C684
KETSU
C685
50V3.3
C686
50V3.3
Q572
2SC3326B
Q571
2SC3326B
C610
50V1.0
C611
0.1uF
C613
50V1.0
C678
6800p
C677
6800p
L655
TEM2137AD
Q610
TA2024
+5VGEN
DCAP2
DCAP1
V5D
AGND1
REF
OVERLOADB
AGND2
V5A
VP1
IN1
MUTE
NC
VP2
IN2
BIASCAP
AGND3
SLEEP
CPUMP
PGND1
NC
VDDA
NC
OUTP1
VDD1
VDD1
OUTM1
OUTM2
VDD2
VDD2
OUTP2
NC
DGND
NC
PGND2
FAULT
C601
0.1uF
C603
0.1uF
R604
8.9K(1%)
C604
82.3u
C608
0.1uF
R608
27K
R610
120K
R612
27K
R613
120K
C614
0.1uF
C630
0.1uF
D657
MA8082-L
C629
50V1.0
C627
0.1uF
C636
16V220
C624
0.1uF
C621
0.1uF
C635
16V220
D656
MA8150-M
L640
1uH
(A-GND)
(D-GND)
R642
1K
D643
1SS365
R645
10k
D642
1SS356
R646
10k
Q580
2SC2712Y
Q580_C
DET_FAULT
L626
L623
L620
L622
TLA3036AF
1SS355
R-_AMP
R+_AMP
L-_AMP
L+_AMP
R-_AMP(1.25mm)
R+_AMP(1.25mm)
L+_AMP(1.25mm)
L-_AMP(1.25mm)
DET_FAULT
C648
0.1u
C646
0.47u
C647
0.47u
R633
1/8W10
R630
1/8W10
0.22uF
12V_AUDIO
GND

32HL83
A-OUT - (2/2)
[SHEET-2/2](18/20)



1
2
3
4
A
B
C
D
E
F
(Audio_Vcc) (4mm)
(Audio_GND) (4mm)
12V_AUDIO
GND
1-A1
1-A2
1-B2
2-C2
2-C2
12V_AUDIO
C602
B330p
(GAISHUU_GND)
1-A1
2-D8
MUTE_AUDIO
W_AMP-IN
C664
KETSU
R_AMP-IN
C665
50V3.3
R680
KETSU
C687
KETSU
R672
4.7k
R677
47K
Q672
2SC3326B
C
B
E
GND
L_AMP-IN
C666
50V3.3
R681
KETSU
C688
KETSU
R670
4.7k
R676
47K
Q671
2SC3326B
GND
Q680_C
1-A1
R_AMP-IN
1-A1
L_AMP-IN
1-B2
GND
2-B2
2-C2
W_AMP-IN
1-A1
1-A1
1-B2
GND
2-B2
2-C2
R_AMP-IN
L_AMP-IN
GND
GND
W_AMP-IN
GND
GND
L643
KETSU
L645
TEM2142AD
GR606
KETSU
GR607
KETSU
GR608
KETSU
GR609
KETSU
B600
9V
9V
1-B1
MUTE_SPK
MUTE_SPK
D620
1SS355
R616
3.3K
C615
16V100
R618
22K
R619
47K
Q678
2SC2712Y
Q679
2SC2712Y
D646
1SS355
Q677
RN2404
DET_HP
DET_HP
R614
10k
D629
1SS355
R615
100K

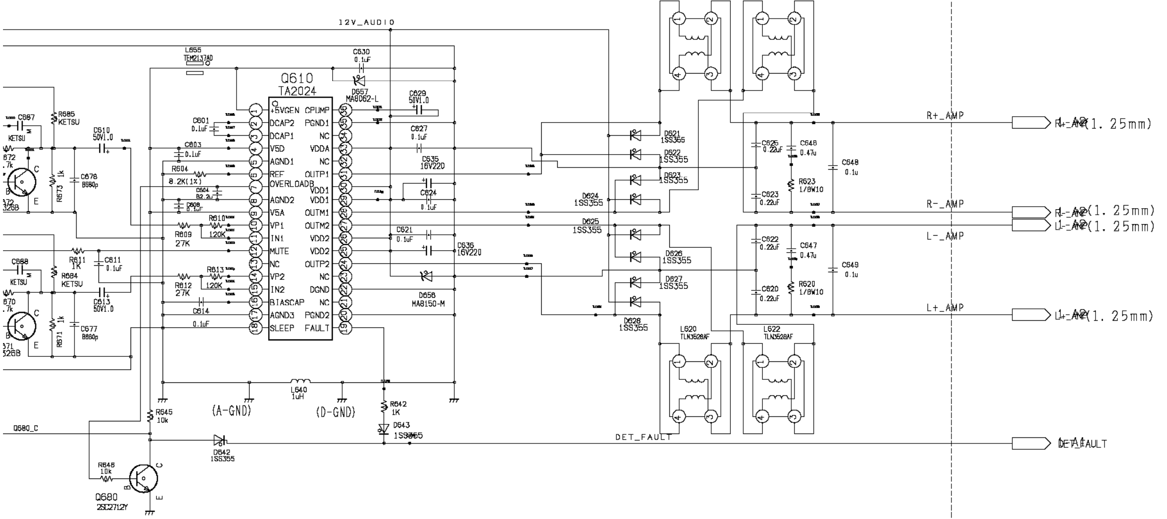
The surface patterns under Q610 and Q6100 should be GN
through-holes between suface GNDs as much as possible.

Corresponded to shielding (should be enclosed with GND)

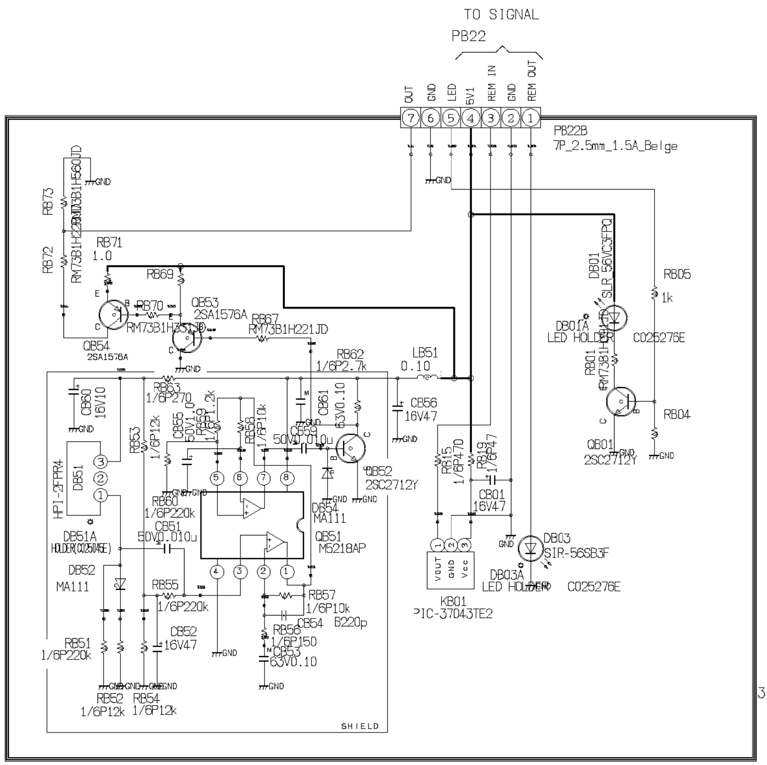
(Screw: Chassis GND)

e GND, and make many more
sible.

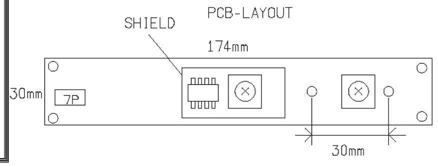
AUDIO OUTPUT(R/L)


12V_AUDIO
L655
TEM2137AD
C630
0.1uF
D657
MA8062-L
C629
50V1.0
Q610
TA2024
1 +5VGEN
2 DCAP2
3 DCAP1
4 V5D
5 AGND1
6 REF
7 OVERLOADB
8 AGND2
9 V5A
10 VP1
11 IN1
12 MUTE
13 NC
14 VP2
15 IN2
16 BIASCAP
17 AGND3
18 SLEEP
36 CPUMP
35 PGND1
34 NC
33 VDDA
32 NC
31 OUTP1
30 VDD1
29 VDD1
28 OUTM1
27 OUTM2
26 VDD2
25 VDD2
24 OUTP2
23 NC
22 DGND
21 NC
20 PGND2
19 FAULT
C601
0.1uF
C603
0.1uF
R604
8.2K(1%)
C604
82.2u
C608
0.1uF
R609
27K
R610
120K
R611
1K
C611
0.1uF
R612
27K
R613
120K
C614
0.1uF
C627
0.1uF
C635
16V220
C624
0.1uF
C621
0.1uF
C636
16V220
D658
MA8150-M
C687
KETSU
R685
KETSU
C610
50V1.0
672
.7k
R673
1k
C678
8680p
372
326B
C688
KETSU
R684
KETSU
C613
50V1.0
670
.7k
R671
1k
C677
8680p
371
326B
C
B
E
L640
1uH
(A-GND)
(D-GND)
R645
10k
R642
1K
D643
1SS355
Q680_C
D642
1SS355
R646
10k
Q680
2SC2712Y
L625
TLN3528AF
L623
TLN3528AF
L620
TLN3528AF
L622
TLN3528AF
1
2
3
4
D621
1SS355
D622
1SS355
D623
1SS355
D624
1SS355
D625
1SS355
D626
1SS355
D627
1SS355
D628
1SS355
C625
0.22uF
C623
0.22uF
C646
0.47u
R623
1/8W10
C648
0.1u
C622
0.22uF
C620
0.22uF
C647
0.47u
R620
1/8W10
C649
0.1u
R+_AMP
R-_AMP
L-_AMP
L+_AMP
R+_AMP(1. 25mm)
R-_AMP(1. 25mm)
L-_AMP(1. 25mm)
L+_AMP(1. 25mm)
DET_FAULT
DET_FAULT

32HL83
A-OUT - (2/2)
[SHEET-2/2](18/20)


TO SIGNAL
PB22
OUT
GND
LED
5V1
REM IN
GND
REM OUT
7
6
5
4
3
2
1
PB22B
7P_2.5mm_1.5A_Belge
GND
RB73
RB72
RM73B1H220JD
RM73B1H560JD
RB71
1.0
RB69
E
B
C
RB70
RM73B1H331JD
QB53
2SA1576A
RB67
RM73B1H221JD
QB54
2SA1576A
RB62
1/6P2.7k
LB51
0.10
RB63
1/6P270
CB60
16V10
CB56
16V47
CB61
63V0.10
CB55
50V1.0
RB59
1/6P1.2k
RB58
1/6P10k
CB59
50V0.010u
RB53
1/6P12k
QB52
2SC2712Y
DB51
HPI-2FPR4
DB51A
HOLDER(C025045E)
RB60
1/6P220k
CB51
50V0.010u
DB54
MA111
QB51
M5218AP
DB52
MA111
RB55
1/6P220k
RB57
1/6P10k
CB54
B220p
RB56
1/6P150
CB53
63V0.10
CB52
16V47
RB51
1/6P220k
RB52
1/6P12k
RB54
1/6P12k
SHIELD
RB15
1/6P470
RB19
1/6P47
CB01
16V47
KB01
PIC-37043TE2
VOUT
GND
Vcc
DB03
SIR-56SB3F
DB03A
LED HOLDER
C025276E
DB01
SLR_56VC3FPQ
DB01A
LED HOLDER
C025276E
RB01
RM73B1H101JD
RB05
1k
RB04
QB01
2SC2712Y

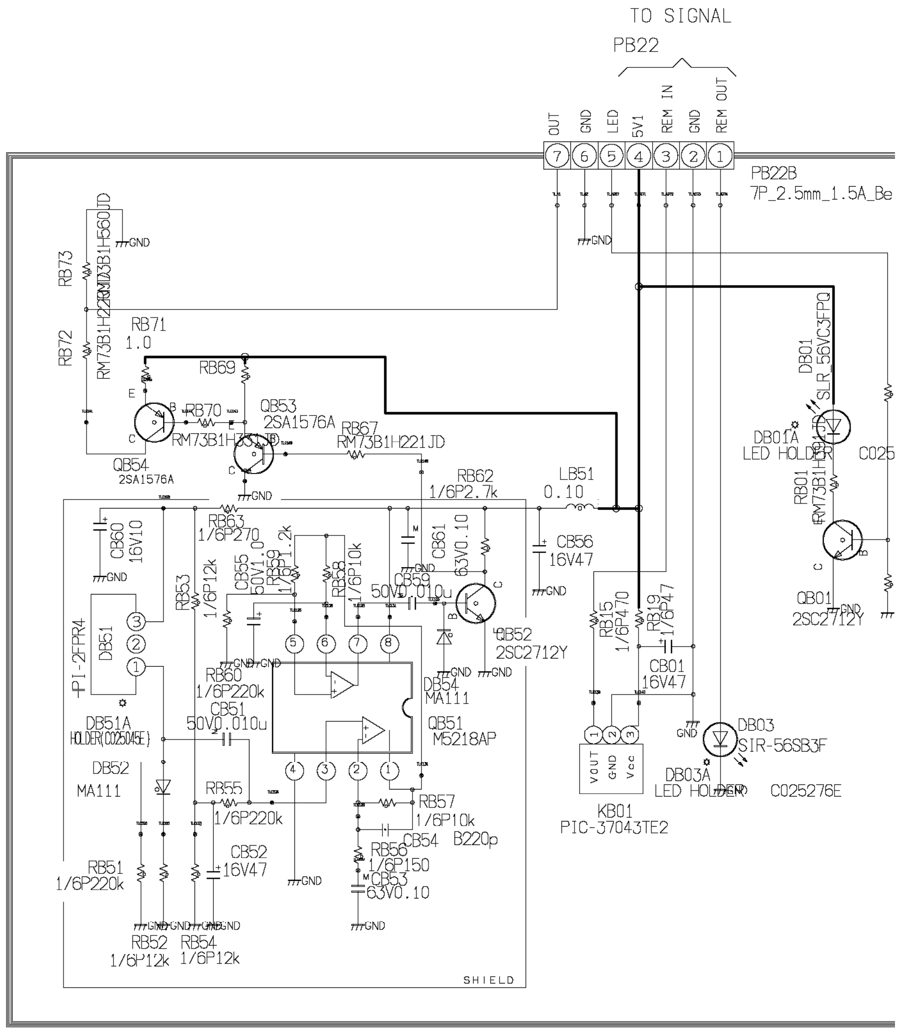
IR-PASS/RMT/LED


PCB-LAYOUT
SHIELD
174mm
30mm
7P
30mm

32HL83
IR-PASSTHROURGH(19/20)

1

A



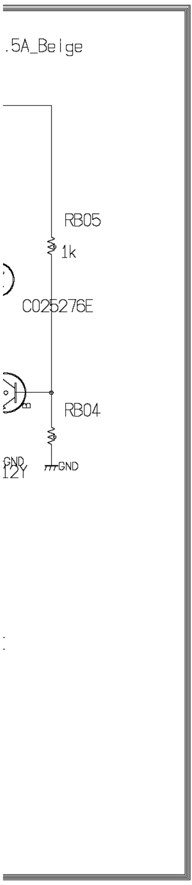
TO SIGNAL
PB22
OUT
GND
LED
5V1
REM IN
GND
REM OUT
7
6
5
4
3
2
1
PB22B
7P_2.5mm_1.5A_Be
GND
RB73
RM73B1H560JD
RB72
RM73B1H220JD
RB71
1.0
RB69
E
B
C
RB70
RM73B1H331JD
QB53
2SA1576A
QB54
2SA1576A
RB67
RM73B1H221JD
RB62
1/6P2.7k
LB51
0.10
RB63
1/6P270
CB60
16V10
DB51
PI-2FPR4
RB53
1/6P12k
CB55
50V1.0
RB59
1/6P1.2k
RB58
1/6P10k
CB61
63V0.10
CB59
50V0.010u
QB52
2SC2712Y
CB56
16V47
DB54
MA111
QB51
M5218AP
RB60
1/6P220k
CB51
50V0.010u
DB51A
HOLDER(C025045E)
DB52
MA111
RB55
1/6P220k
RB57
1/6P10k
CB54
B220p
RB56
1/6P150
CB53
63V0.10
CB52
16V47
RB51
1/6P220k
RB52
1/6P12k
RB54
1/6P12k
SHIELD
RB15
1/6P470
RB19
1/6P47
CB01
16V47
KB01
PIC-37043TE2
VOUT
GND
Vcc
DB03
SIR-56SB3F
DB03A
LED HOLDER
C025276E
DB01
SLR_56VC3FPQ
DB01A
LED HOLDER
C025
RB01
RM73B1H
QB01
2SC2712Y

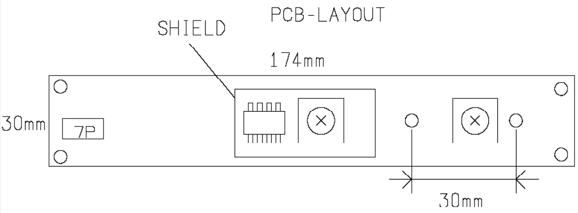
IR-PASS/RMT/LED

B

1

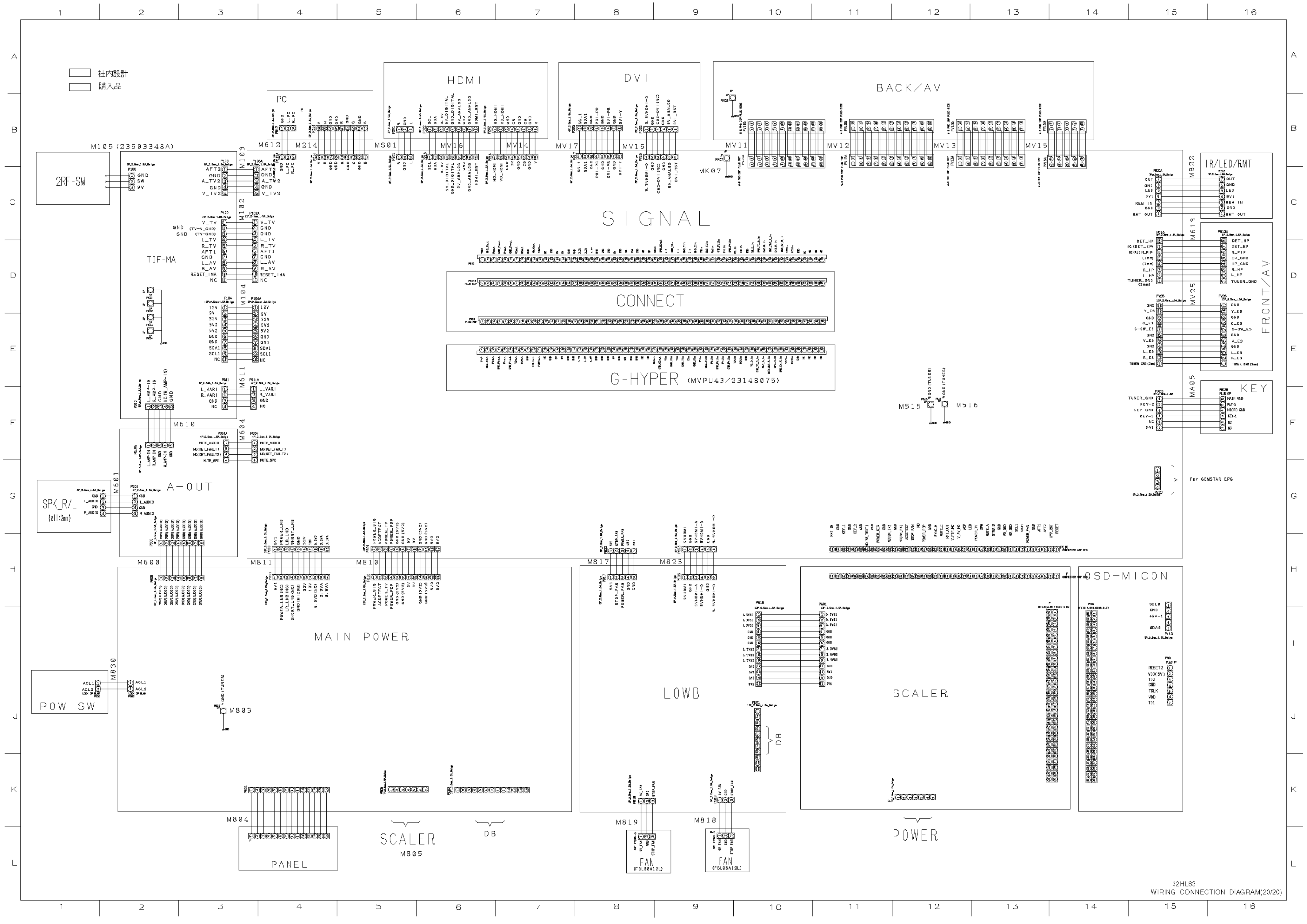
A


.5A_Belge
RB05
1k
C025276E
RB04
GND
12Y
GND

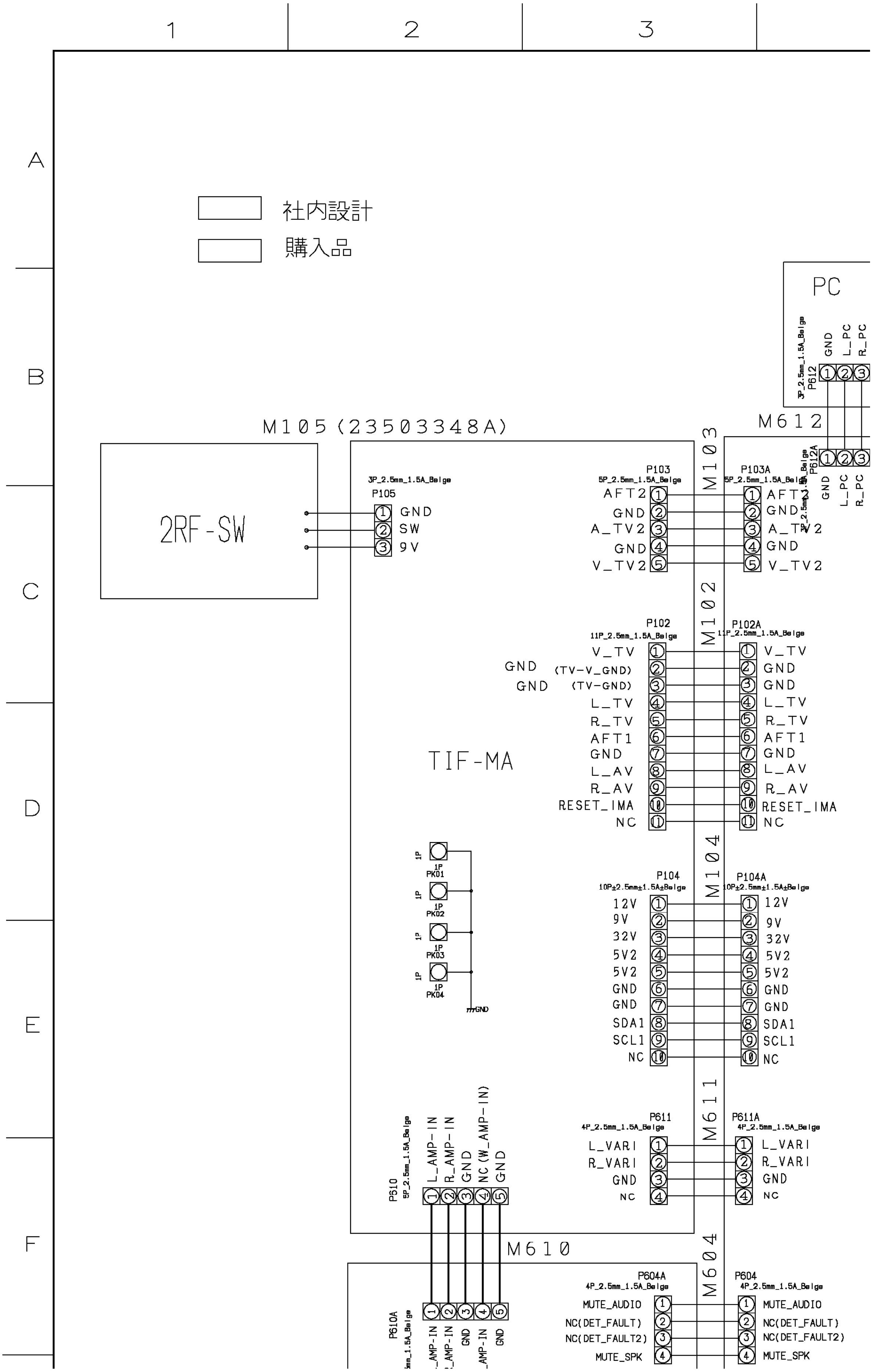

PCB-LAYOUT
SHIELD
174mm
30mm
7P
30mm

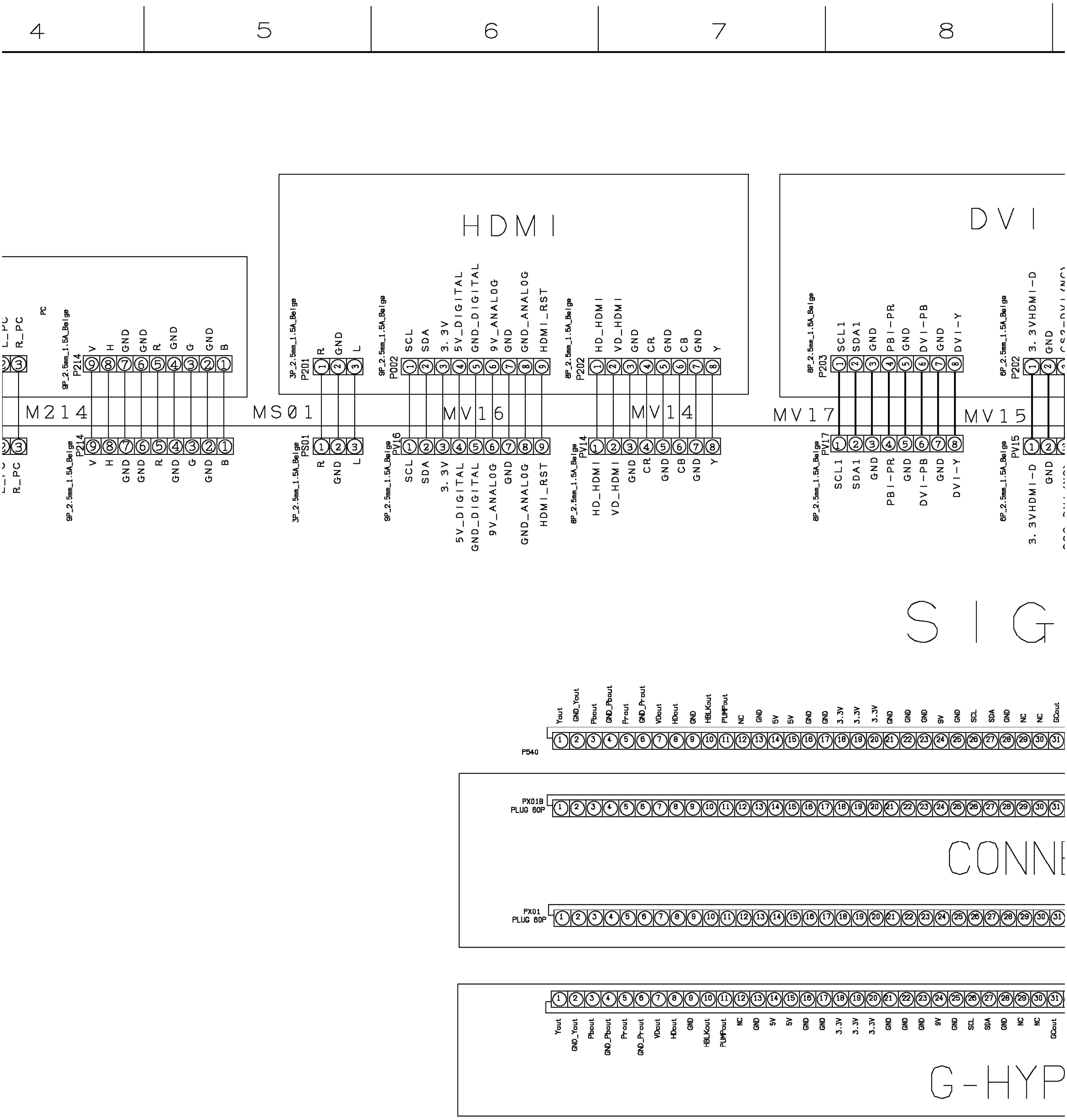
B

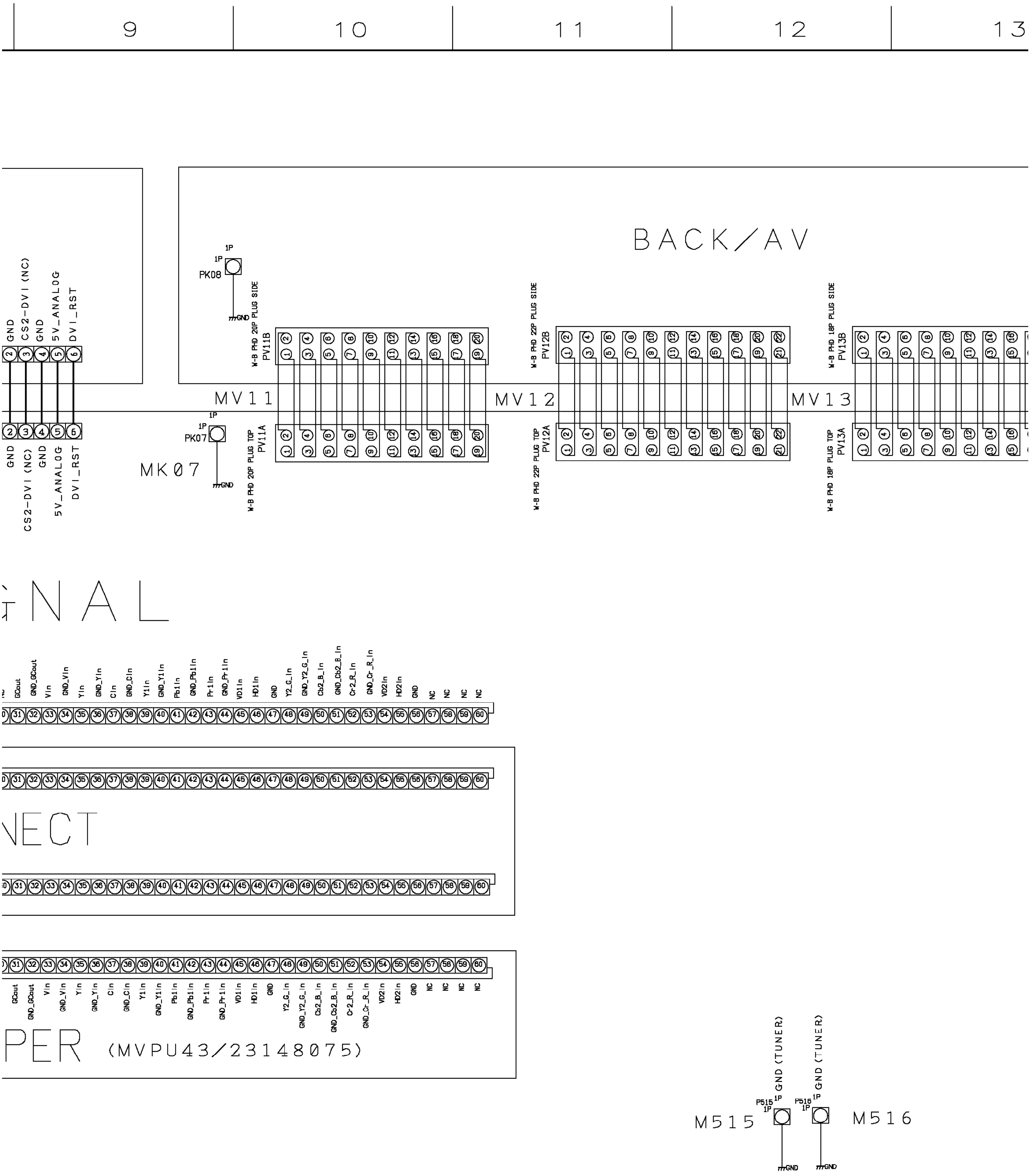
32HL83
IR-PASSTHROURGH(19/20)

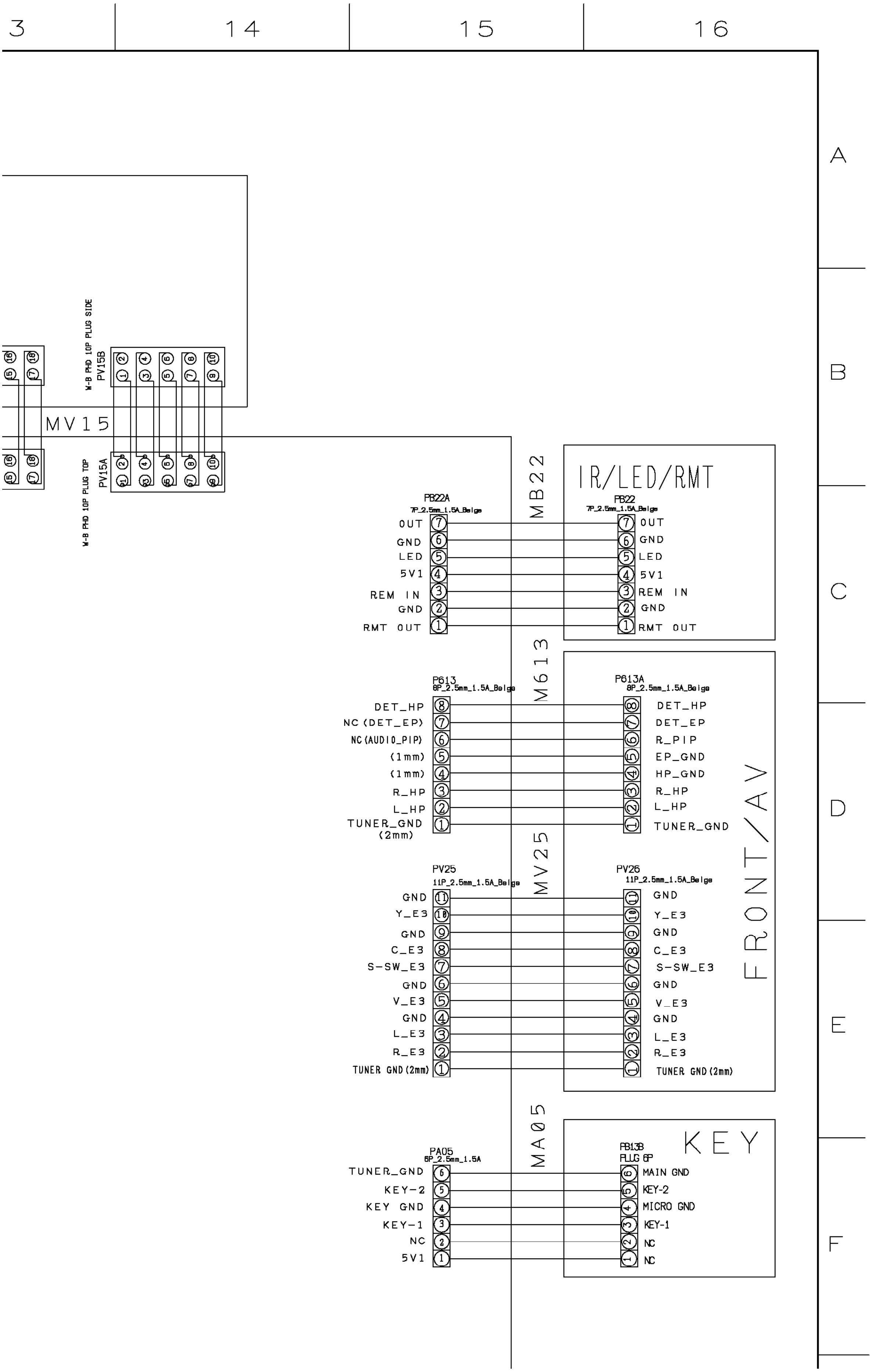

社内設計
購入品
PC
HDMI
DVI
BACK/AV
M105(23503348A)
2RF-SW
M612
M214
MS01
MV16
MV14
MV17
MV15
MV11
MV12
MV13
MV15
MB22
IR/LED/RMT
M103
M102
M104
M611
M610
M604
M601
TIF-MA
A-OUT
SPK_R/L
(all:2mm)
SIGNAL
CONNECT
G-HYPER (MVPU43/23148075)
MK07
M613
MV25
FRONT/AV
MA05
KEY
M515
M516
For GEMSTAR EPG
M600
M811
M810
M817
M823
OSD-MICON
MAIN POWER
LOWB
SCALER
POW SW
M830
M803
DB
M804
PANEL
SCALER
M805
DB
M819
M818
FAN
(FBL08A12L)
FAN
(FBL08A12L)
POWER
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
J
K
L

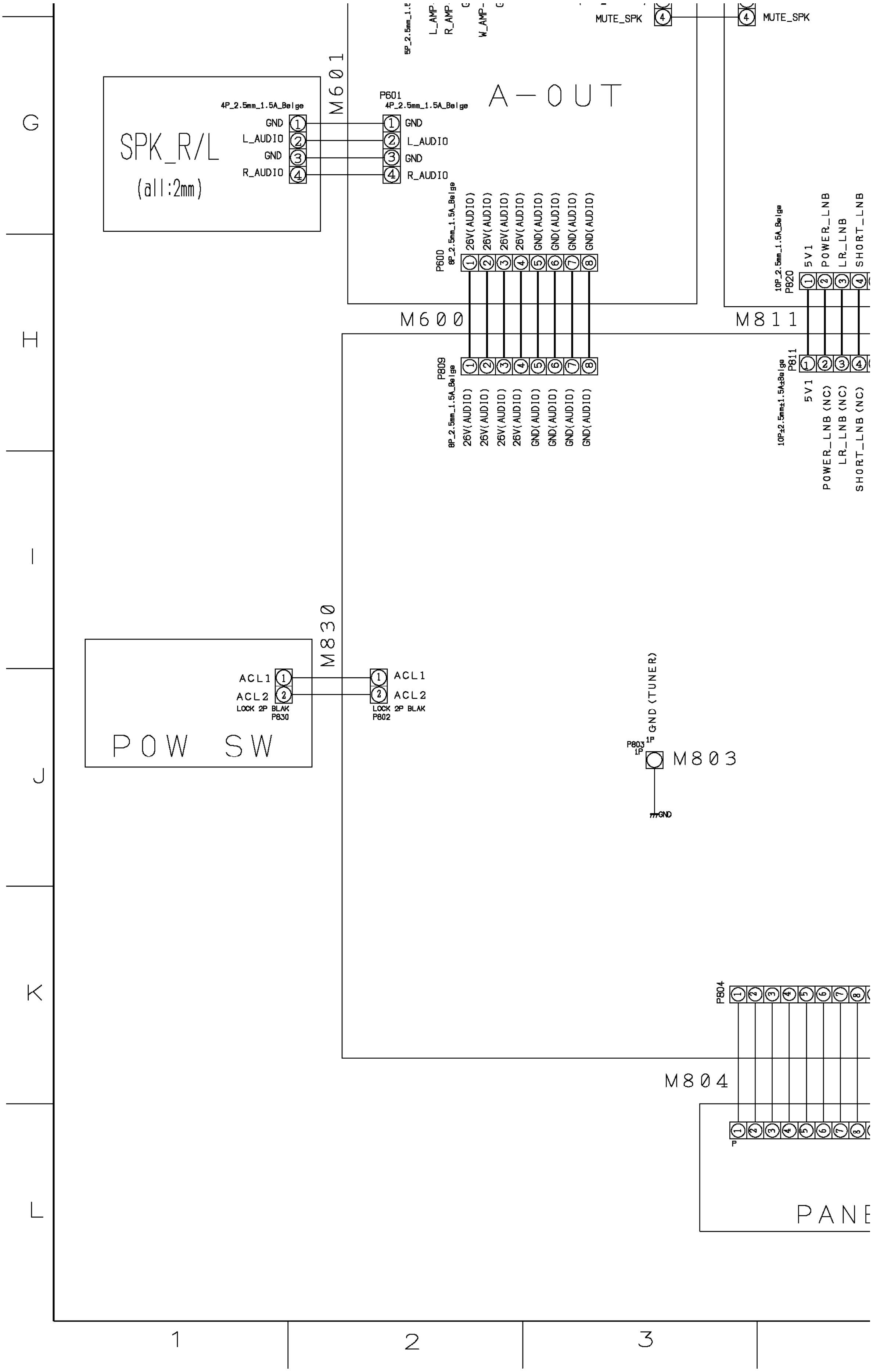
32HL83
WIRING CONNECTION DIAGRAM(20/20)

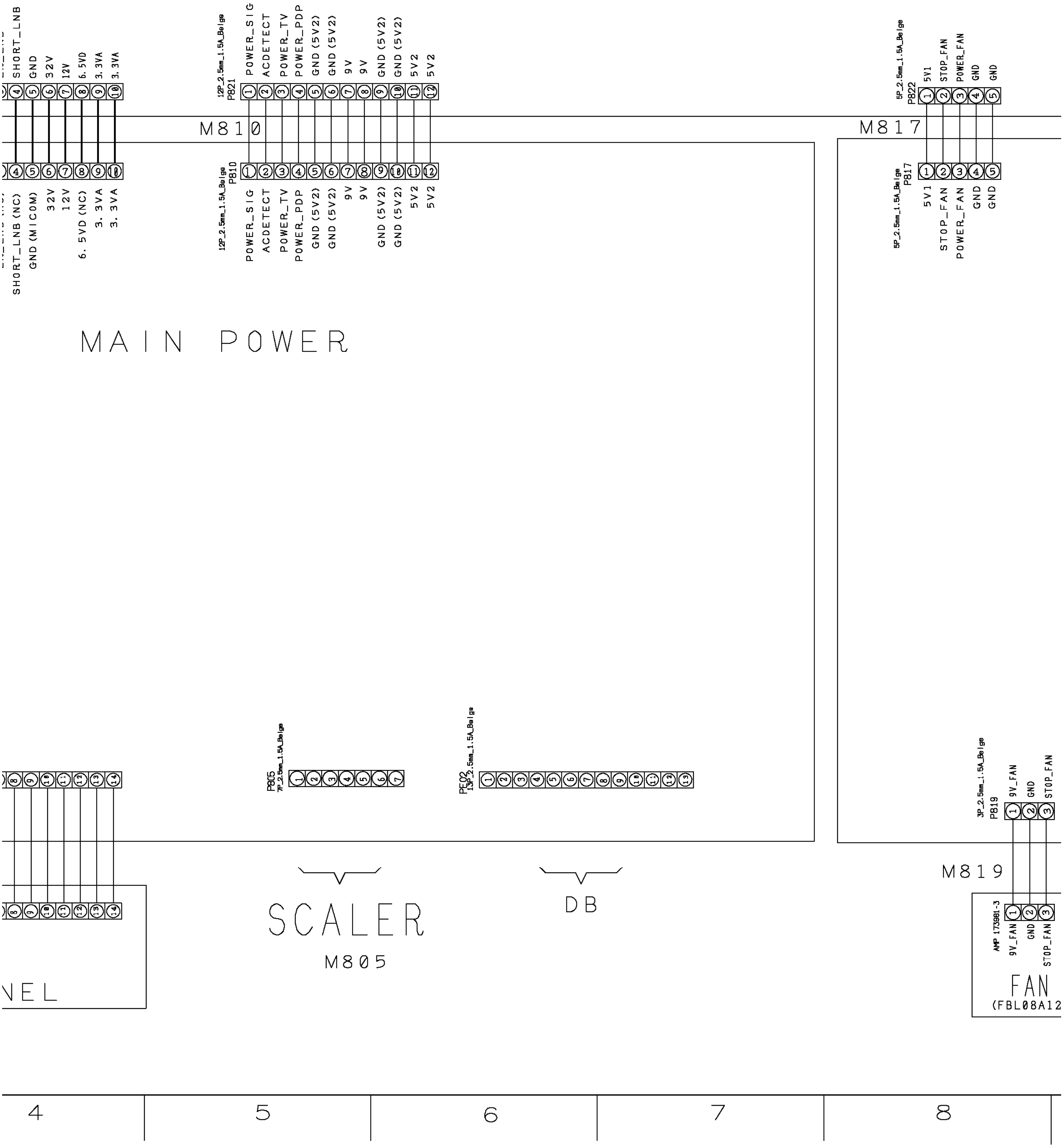

1
2
3
A
B
C
D
E
F
社内設計
購入品
PC
3P_2.5mm_1.5A_Beige
P612
GND
L_PC
R_PC
M612
P612A
M105 (23503348A)
2RF-SW
3P_2.5mm_1.5A_Beige
P105
GND
SW
9V
TIF-MA
M103
P103
5P_2.5mm_1.5A_Beige
AFT2
GND
A_TV2
GND
V_TV2
P103A
5P_2.5mm_1.5A_Beige
AFT2
GND
A_TV2
GND
V_TV2
M102
P102
11P_2.5mm_1.5A_Beige
V_TV
GND (TV-V_GND)
GND (TV-GND)
L_TV
R_TV
AFT1
GND
L_AV
R_AV
RESET_IMA
NC
P102A
11P_2.5mm_1.5A_Beige
V_TV
GND
GND
L_TV
R_TV
AFT1
GND
L_AV
R_AV
RESET_IMA
NC
1P
PK01
1P
PK02
1P
PK03
1P
PK04
GND
M104
P104
10P±2.5mm±1.5A±Beige
12V
9V
32V
5V2
5V2
GND
GND
SDA1
SCL1
NC
P104A
10P±2.5mm±1.5A±Beige
12V
9V
32V
5V2
5V2
GND
GND
SDA1
SCL1
NC
M611
P611
4P_2.5mm_1.5A_Beige
L_VARI
R_VARI
GND
NC
P611A
4P_2.5mm_1.5A_Beige
L_VARI
R_VARI
GND
NC
P610
5P_2.5mm_1.5A_Beige
L_AMP-IN
R_AMP-IN
GND
NC (W_AMP-IN)
GND
M610
P610A
M604
P604A
4P_2.5mm_1.5A_Beige
MUTE_AUDIO
NC(DET_FAULT)
NC(DET_FAULT2)
MUTE_SPK
P604
4P_2.5mm_1.5A_Beige
MUTE_AUDIO
NC(DET_FAULT)
NC(DET_FAULT2)
MUTE_SPK

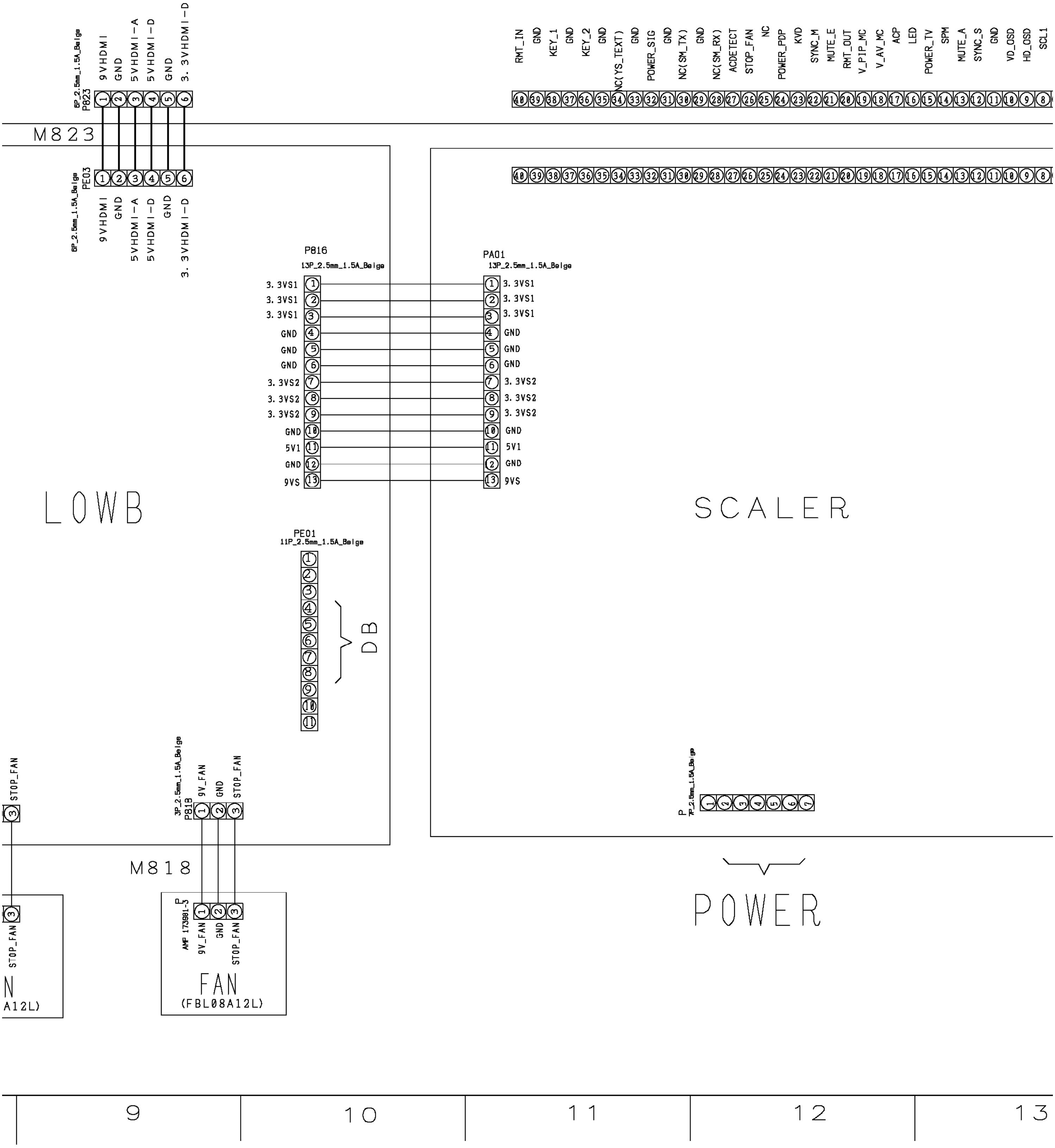

4
5
6
7
8
HDMI
DVI
PC
L_PC
R_PC
9P_2.5mm_1.5A_Beige
P214
V
H
GND
GND
R
GND
G
GND
B
M214
MS01
3P_2.5mm_1.5A_Beige
P201
PS01
R
GND
L
9P_2.5mm_1.5A_Beige
P002
PV16
SCL
SDA
3.3V
5V_DIGITAL
GND_DIGITAL
9V_ANALOG
GND
GND_ANALOG
HDMI_RST
MV16
8P_2.5mm_1.5A_Beige
P202
PV14
HD_HDMI
VD_HDMI
GND
CR
GND
CB
GND
Y
MV14
8P_2.5mm_1.5A_Beige
P203
PV17
SCL1
SDA1
GND
PBI-PR
GND
DVI-PB
GND
DVI-Y
MV17
8P_2.5mm_1.5A_Beige
P202
PV15
3.3VHDMI-D
GND
MV15
SIG
P540
Yout
GND_Yout
Pbout
GND_Pbout
Prout
GND_Prout
VDout
HDout
GND
HBLKout
PUMPout
NC
GND
5V
5V
GND
GND
3.3V
3.3V
3.3V
GND
GND
GND
9V
GND
SCL
SDA
GND
NC
NC
GCout
PX01B
PLUG 60P
CONNE
PX01
PLUG 60P
G-HYP

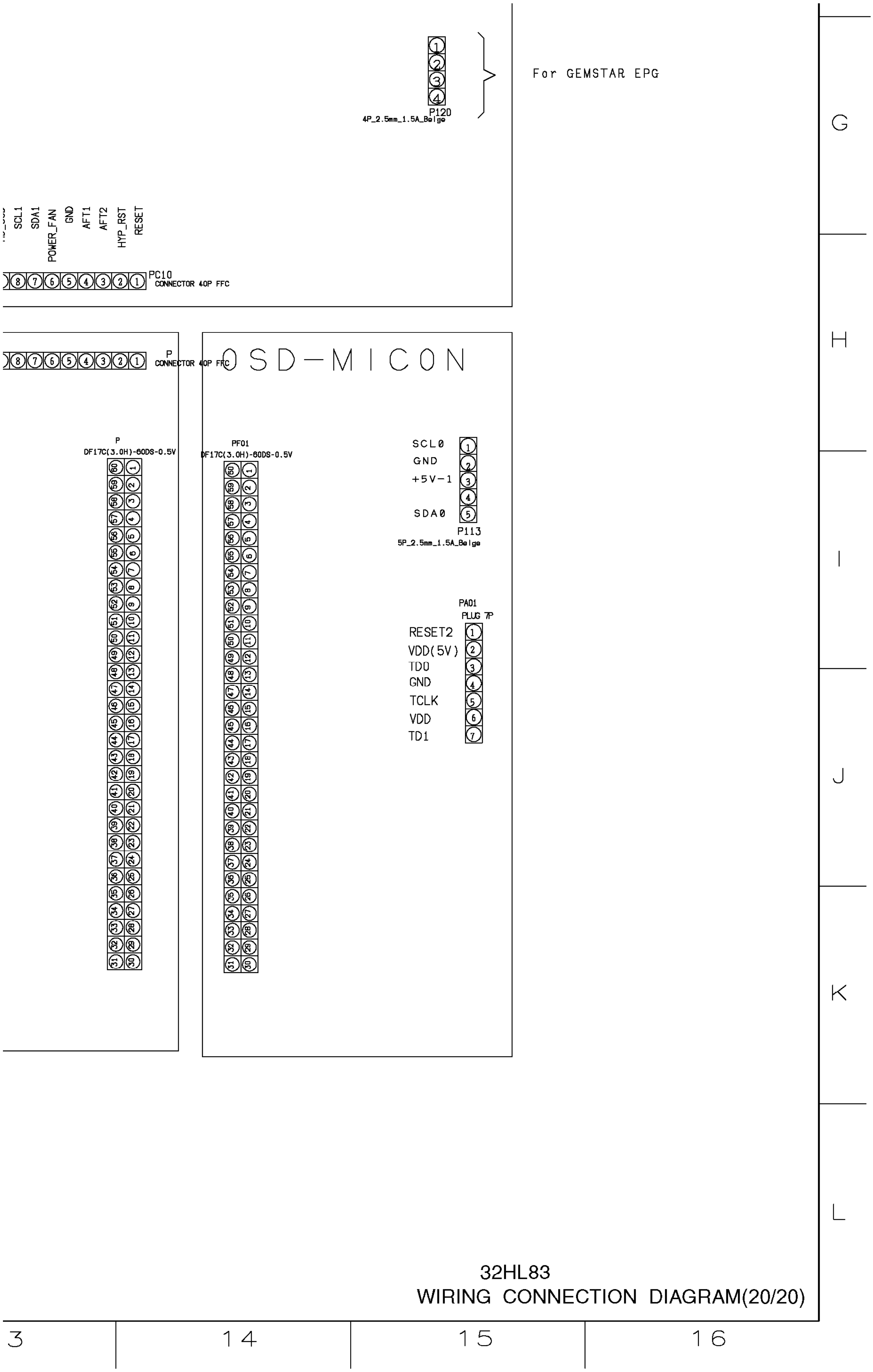

9
10
11
12
13
BACK/AV
PK08
1P
GND
W-B PHD 20P PLUG SIDE
PV11B
W-B PHD 22P PLUG SIDE
PV12B
W-B PHD 18P PLUG SIDE
PV13B
MV11
MV12
MV13
PK07
1P
MK07
GND
W-B PHD 20P PLUG TOP
PV11A
W-B PHD 22P PLUG TOP
PV12A
W-B PHD 18P PLUG TOP
PV13A
GND
CS2-DVI (NC)
GND
5V_ANALOG
DVI_RST
NAL
GCout
GND_GCout
VIn
GND_VIn
YIn
GND_YIn
CIn
GND_CIn
Y1In
GND_Y1In
Pb1In
GND_Pb1In
Pr1In
GND_Pr1In
VD1In
HD1In
GND
Y2_G_In
GND_Y2_G_In
Cb2_B_In
GND_Cb2_B_In
Cr2_R_In
GND_Cr_R_In
VD2In
HD2In
GND
NC
NC
NC
NC
NECT
PER (MVPU43/23148075)
GND (TUNER)
GND (TUNER)
P515
P516
M515
M516
GND


3
14
15
16
A
B
C
D
E
F
W-B PHD 10P PLUG SIDE
PV15B
MV15
W-B PHD 10P PLUG TOP
PV15A
MB22
IR/LED/RMT
PB22A
7P_2.5mm_1.5A_Beige
PB22
7P_2.5mm_1.5A_Beige
OUT
GND
LED
5V1
REM IN
GND
RMT OUT
M613
P613
8P_2.5mm_1.5A_Beige
P613A
8P_2.5mm_1.5A_Beige
DET_HP
NC(DET_EP)
NC(AUDIO_PIP)
(1mm)
(1mm)
R_HP
L_HP
TUNER_GND
(2mm)
DET_HP
DET_EP
R_PIP
EP_GND
HP_GND
R_HP
L_HP
TUNER_GND
FRONT/AV
MV25
PV25
11P_2.5mm_1.5A_Beige
PV26
11P_2.5mm_1.5A_Beige
GND
Y_E3
GND
C_E3
S-SW_E3
GND
V_E3
GND
L_E3
R_E3
TUNER GND(2mm)
MA05
KEY
PA05
6P_2.5mm_1.5A
PB13B
PLUG 6P
TUNER_GND
KEY-2
KEY GND
KEY-1
NC
5V1
MAIN GND
KEY-2
MICRO GND
KEY-1
NC
NC


G
H
I
J
K
L
1
2
3
SPK_R/L
(all:2mm)
4P_2.5mm_1.5A_Beige
GND
L_AUDIO
GND
R_AUDIO
M601
P601
4P_2.5mm_1.5A_Beige
A-OUT
L_AMP
R_AMP
W_AMP
MUTE_SPK
MUTE_SPK
P600
8P_2.5mm_1.5A_Beige
26V(AUDIO)
GND(AUDIO)
M600
P809
8P_2.5mm_1.5A_Beige
P820
10P_2.5mm_1.5A_Beige
5V1
POWER_LNB
LR_LNB
SHORT_LNB
M811
P811
10P±2.5mm±1.5A±Beige
POWER_LNB (NC)
LR_LNB (NC)
SHORT_LNB (NC)
M830
POW SW
ACL1
ACL2
LOCK 2P BLAK
P830
P802
GND (TUNER)
P803
1P
M803
GND
P804
M804
PANE


SHORT_LNB
GND
32V
12V
6.5VD
3.3VA
3.3VA
SHORT_LNB (NC)
GND (MICOM)
32V
12V
6.5VD (NC)
3.3VA
3.3VA
12P_2.5mm_1.5A_Beige
P821
POWER_SIG
ACDETECT
POWER_TV
POWER_PDP
GND (5V2)
GND (5V2)
9V
9V
GND (5V2)
GND (5V2)
5V2
5V2
M810
12P_2.5mm_1.5A_Beige
P810
POWER_SIG
ACDETECT
POWER_TV
POWER_PDP
GND (5V2)
GND (5V2)
9V
9V
GND (5V2)
GND (5V2)
5V2
5V2
MAIN POWER
5P_2.5mm_1.5A_Beige
P822
5V1
STOP_FAN
POWER_FAN
GND
GND
M817
5P_2.5mm_1.5A_Beige
P817
5V1
STOP_FAN
POWER_FAN
GND
GND
P805
7P_2.5mm_1.5A_Beige
PE02
13P_2.5mm_1.5A_Beige
SCALER
M805
DB
NEL
3P_2.5mm_1.5A_Beige
P819
9V_FAN
GND
STOP_FAN
M819
AMP 173981-3
9V_FAN
GND
STOP_FAN
FAN
(FBL08A12
4
5
6
7
8


M823
P823
6P_2.5mm_1.5A_Beige
9VHDMI
GND
5VHDMI-A
5VHDMI-D
GND
3.3VHDMI-D
PE03
6P_2.5mm_1.5A_Beige
9VHDMI
GND
5VHDMI-A
5VHDMI-D
GND
3.3VHDMI-D
RMT_IN
GND
KEY_1
GND
KEY_2
GND
NC(YS_TEXT)
GND
POWER_SIG
GND
NC(SM_TX)
GND
NC(SM_RX)
ACDETECT
STOP_FAN
NC
POWER_PDP
KVD
SYNC_M
MUTE_E
RMT_OUT
V_PIP_MC
V_AV_MC
ACP
LED
POWER_TV
SPM
MUTE_A
SYNC_S
GND
VD_OSD
HD_OSD
SCL1
P816
13P_2.5mm_1.5A_Beige
3.3VS1
3.3VS1
3.3VS1
GND
GND
GND
3.3VS2
3.3VS2
3.3VS2
GND
5V1
GND
9VS
PA01
13P_2.5mm_1.5A_Beige
3.3VS1
3.3VS1
3.3VS1
GND
GND
GND
3.3VS2
3.3VS2
3.3VS2
GND
5V1
GND
9VS
LOWB
SCALER
PE01
11P_2.5mm_1.5A_Beige
DB
STOP_FAN
P818
3P_2.5mm_1.5A_Beige
9V_FAN
GND
STOP_FAN
P
7P_2.5mm_1.5A_Beige
M818
P
AMP 173981-3
9V_FAN
GND
STOP_FAN
FAN
(FBL08A12L)
STOP_FAN
N
A12L)
POWER
9
10
11
12
13



P120
4P_2.5mm_1.5A_Beige
For GEMSTAR EPG
SCL1
SDA1
POWER_FAN
GND
AFT1
AFT2
HYP_RST
RESET
PC10
CONNECTOR 40P FFC
P
CONNECTOR 40P FFC
OSD-MICON
P
DF17C(3.0H)-60DS-0.5V
PF01
DF17C(3.0H)-60DS-0.5V
SCL0
GND
+5V-1
SDA0
P113
5P_2.5mm_1.5A_Beige
PA01
PLUG 7P
RESET2
VDD(5V)
TD0
GND
TCLK
VDD
TD1
G
H
I
J
K
L
3
14
15
16

32HL83

WIRING CONNECTION DIAGRAM(20/20)

SPECIFICATIONS

Television System
NTSC standard

Channel Coverage
VHF: 2 through 13
UHF: 14 through 69
Cable TV: Mid band (A-8 through A-1, A through I)
Super band (J through W)
Hyper band (AA through ZZ, AAA, BBB)
Ultra band (65 through 94, 100 through 125)

Power Source
110-240 V AC, 50/60 Hz

Power Consumption
150 W (average)

Audio Power
10 W + 10 W

Speaker Type
Four 2 x 3-1/2 inches (50 x 90 mm)

Video/Audio Terminals
- S-VIDEO INPUT
  - Y : 1 V(p-p), 75 ohm, negative sync.
  - C : 0.286 V(p-p) (burst signal), 75 ohm
- VIDEO/AUDIO INPUT
  - VIDEO: 1 V(p-p), 75 ohm, negative sync.
  - AUDIO: 150 mV(rms) (30% modulation equivalent, 47k ohm)
- ColorStream® (component video) INPUT
  - Y : 1V(p-p), 75 ohm
  - P_R: 0.7 V(p-p), 75 ohm
  - P_B: 0.7 V(p-p), 75 ohm
  - AUDIO: 150 mV(rms), 47k ohm
- VIDEO/AUDIO OUTPUT
  - VIDEO: 1 V(p-p), 75 ohm, negative sync.
  - AUDIO: 150 mV(rms) (30% modulation equivalent, 4.7k ohm)
- VARIABLE AUDIO OUTPUT
  - 0–300 mV(rms) (30% modulation equivalent, 4.7k ohm)
- DVI/HDCP INPUT
  - HDCP compliant
  - E-EDID* 1.3 compliant
  - DVI-D uncompressed, high-speed, digital single-link connection
  - Suggested input scan rates: 1080i, 720p, 480p, 480i
- Headphones jack
  - 3.5 mm stereo

TheaterLink
OUTPUT: 3 V(p-p), 10k ohm

Dimensions
Width : 32-9/32 inches (820 mm)
Height : 18-37/64 inches (472 mm)
Depth : 5-25/64 inches (137 mm)

Mass (weight)
47.8 lbs (21.7 kg)

Operating condition
Temperature: 32°F – 95°F (0°C – 35°C)
Humidity: 20 – 80% (No moisture condensation)

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*E-EDID = Enhanced-Extended Display Identification

∗ Please refer to owner's manual in detail.
Design and specifications are subject to change without notice.

– END —